Version 2.5.2 (Release) of MxControlCenter

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Special Integration of the new S14 Camera Models

With the S14D, the Hemispheric technology is now also available in a dual camera. This means that all hemispheric display modes that can be configurated and displayed for a single sensor module (e.g., the Q24M) can now be configurated and displayed simultaneously for both of the two hemispheric sensor modules of the S14D. MxControlCenter supports these settings.

Setting of the Camera Display Modes

In the **Camera Display Mode** section of the **PTZ Controls** sidebar panel, you select with the first box if the camera should deliver only the image of one sensor (e.g., with a S14M or a S14D that are used as Day/Night cameras) or if the images of both sensor modules should be displayed as a dual image. If a dual image is displayed then you have to select the right and left sensor image with "Alt-click" individually in order to set the desired display mode for each one. In the second box you then select the desired display mode just as when selecting the display mode for a single image.

Performing Post PTZ Actions in Subviews of the Camera Image

As described above, the dual image of a S14D can consist of up to 8 different subviews, namely when selecting surround view with 4 subviews for the left and right sensor each. Each of the various subviews of a single as well as a dual image in MxControlCenter can now be selected for PTZ actions and, if needed, for post PTZ image correction. In order to do that, you select the desired subview in the **MxCC Display Mode** section of the **PTZ Controls** sidebar panel. Therefore, the subviews are numbered consecutively as follows: Subview of the left sensor image line by line from left top to right button, then the subviews of the right sensor image line by line from left top to right bottom.

Selection of the Camera Loudspeaker and Microphone

More microphone features are available for S14 camera models in the Audio tab of the Camera Configuration

Integration of the Video Analysis Tool MxAnalytics for Q24M Models With the new image analysis functions of **MxAnalytics** (with Camera Software Version 4.1.4.11) object movements within the camera image can be detected and analyzed. This includes the illustration of the distribution of object movements in **Heatmaps** and the analysis of the crossing of **Counting** Lines by moving objects. The data that is gathered by detection is stored camera internally on SD cards and can thus be used anytime for individual analyses. This version of MxControlCenter supports the configuration of MxAnalytics as well as the analyses of the data generated and stored by MxAnalytics in Q24 camera models. Therefore, MxAnalytics can be configured and used with MxControlCenter without any further usage of the camera web browser. The following enhancements have been implemented:

Configuration of MxAnalytics in the "Camera Configuration" dialog

When selecting a Q24M camera the new MxAnalytics section in the Camera Configuration dialog is available. This section includes the Basic Configuration tab for setting the relevant

function parameter on the camera. This section also includes the Visual Configuration tab for defining the detection areas, the minimum object size for detecting, and the counting lines.

IMPORTANT:

For permanent storing of the detection results camera internally on a SD card, this card has to be formatted and set up with a specific partition for MxAnalytics first. This is done in the new MxFFS Volume Partitioning dialog that can be opened via the Set up MxAnalytics Volume... button in the Basic Configuration tab.

Analysis of the Detection Results in "Event Search & MxAnalytics"

After activating and configuring MxAnalytics on a Q24M, the generated data can be analyzed and displayed anytime in MxControlCenter. The analysis is performed with the "Event Search" in the **Event Search & MxAnalytics** section of the MxControlCenter side panel. In this section, a Q24M camera needs to be selected as source and **MxAnalytics** as search mode. After that the camera can evaluate the data and can show how many objects crossed the counting lines or can display the results of the object movements in a heatmap. The results of the counting line crossings are always displayed as a Counting Line Report in form of a table and can be exported. In addition, the heatmap (with or without the legend) and the counting lines can be displayed in the image via the **Heatmap**, **Counting Lines** and

Legend icons. IMPORTANT:

The settings for the evaluation of the data, e.g., the time range for which the evaluation should be performed, are defined in the **Counting Line Report Profiles** and the **Heatmap Report Profiles**. At the moment, these profiles cannot be edited in MxControlCenter; however, there are several pre-defined profiles that can be selected. These pre-defined profiles are part of the factory configuration of the Camera Software Version 4.1.4.11. Currently, the adjustment or definition of specific evaluation profiles can only be performed in the new **MxAnalytics Control** section of the camera software by using a web browser. However, the current evaluation can be adapted for evaluations with a daily, weekly or monthly range by entering a desired day or month in MxControlCenter.

This is done by activating the **Set Date** check box and entering or selecting the desired day or month. This setting is temporary and effective only for the current evaluation in MxControlCenter – it does not change the profile defined in the camera!

Note:

Currently, the MxAnalytics data stored in the camera is updated automatically only every 15 minutes. Updating cannot be enforced by MxControlCenter and therefore, it can take up to 15 minutes for current detections by MxAnalytics to be included in the counting line reports. This will be changed with the next camera software version.

Other Improvements

Formatting and Encrypting SD Cards for Recording

As described earlier in the section on the integration of MxAnalytics, a dialog for formatting the camera's internal SD card has been integrated. This dialog or rather its function of SD card formatting is independently available from MxAnalytics for all cameras with integrated SD card. In addition, the dialog includes the setup for encrypted data storing on the SD card. To do this, an **encryption password** can be entered before formatting.

For all cameras with SD card, this dialog can be opened via the **MxFFS Volume Partitioning** button in the **External Recording** dialog. The External Recording dialog can be found in **Camera Configuration** > **External Recording** > **Settings** button.

CAUTION:

When using MxControlCenter for directly accessing an encrypted SD card with a card reader, the password entered to encrypt the SD card has to be entered also.

Camera Configuration with Definition of Time Servers

The camera time and time servers to be used can now be set with MxControlCenter also. For that, the new **Time Server** section in the **Camera Configuration** dialog has been integrated. This new section is especially helpful when configuring many previously selected cameras at the same time. This dialog provides the following functions:

Setting the camera time to the time of the local computer

Setting of external time servers as time (NTP) server for the selected cameras

Selecting a camera ("master camera") to be used as time server for other cameras

Setting of the time server for a master camera

Any GPS boxes connected to the cameras are automatically displayed and also used as time server.

Live Access Right

MxControlCenter now has a specific right, which allows controlling the access to the live images of a camera.

PTZ Control with Keyboard

PTZ actions can now be triggered also by using the keyboard - this applies to PTZ actions for live PTZ control of the camera, as well as for post PTZ actions in MxControlCenter. To do this, the following commands are available:

Key Configuration	Triggered PTZ Actions	Limitations
Ctrl + "+"	Zoom in (enlarge)	
Ctrl + "-"	Zoom out (decrease)	
Ctrl + "."	Center image (Center Pan)	
Ctrl + "#"	Zoom x 1	
"Allow left"	Pan left	Only works, if the control in the PTZ control section has the focus
"Allow right"	Pan right	Only works, if the control in the PTZ control section has the focus
"Allow up"	Tilt up	Only works, if the control in the PTZ control section has the focus
"Allow down"	Tilt down	Only works, if the control in the PTZ control section has the focus

Bugfixes

Directly accessing a USB pen-drive or SD card with MxFFS after "hot-unplugging"

If the event storage of a camera on an MxFFS storage medium (USB pen-drive or SD card) had not been properly shut down (i.e., power failure or disconnecting the medium without powering down event storage - "hot-unplugging"), MxControlCenter crashed when trying to directly access the storage medium.

Alarm sound when receiving alarm messages

When receiving alarm messages while the alarm list was hidden, no alarm sound was emitted despite previous activation.

Video search - Image storage In the Video Search dialog, it is possible again to store a JPEG image on the desktop by right-clicking the Save current image on the desktop button.

User rights for PTZ

Users without rights for live PTZ control of the camera could not perform post PTZ actions either.

Mouse-over display in the Video Search dialog

After displaying and hiding a mouse-over window to an image of the filmstrip, the related image in the filmstrip was empty sometimes.

Editing many VM windows in MxControlCenter

When editing in the Camera Configuration dialog more than 99 VM windows that were defined in the camera, a loss of VM windows occurred after restoring to the camera.

Rights for playback of recordings

Users without playback rights could load pre-defined layouts with special display windows for playing back recordings.

Known Limitations

Event Searches not possible in additional program instances

If MxCC has been started several times on the same computer, you can only use the program instance that had been started first to execute event searches. This is not possible for all program instances started after the first one.

Program behavior with activated Event Cache

When the event cache contains many cameras and/or a very large number of event, the first launch of MxControlCenter as well as subsequent program starts may take up to several minutes. The same might occur when changing the configuration (INI file).

Action logs when using several program instances

If MxCC has been started several times on the same computer, the application creates different action log files for each instance. Writing to the same file is currently not supported.

Window definition on D14Di-180 $^{\circ}$ models only possible in Full Image mode

Due to restrictions in the camera software, defining exposure and video motion windows does not work in the Panorama display mode. Trying to do so will prompt MxCC to show a corresponding information box.

Remote-control commands of SSL cameras to MxControlCenter require port If a camera can only be reached via https/SSL, the remote-control commands sent to the MxControlCenter computer and which use the camera IP address need to include the camera's SSL port.

Examples:

ShowInExtraWindow=\$(ID.ETHERNET):443 ShowInExtraWindow=ownip:443

Post PTZ settings for exporting data When applying post PTZ settings (including distortion correction) to exported data, you need to apply these settings in the **PTZ Control** section of the sidebar before you add any time ranges to the export list. Changing these settings afterwards with the export list opened will not apply the desired changes.

Not all language packs available

The language packages for Chinese (China), Dutch, Italian, Japanese, Portuguese (Brazil), Russian, Spanish and Turkish are not yet available and will be delivered later on.