



ibaCapture v5.0.0

New Features

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iba AG

Table of contents

1	General remarks.....	2
1.1	Licensing system WIBU CodeMeter is now the default	2
1.2	Migrating from ibaCapture v4 to ibaCapture v5	2
2	Support for the H.265/HEVC video codec	4
3	Overlay images	5
3.1	Configuring an overlay image	5
3.2	Restrictions with enabled overlay	7
4	Support password-protected ibaCapture-ScreenCam instances	8
4.1	Setting in ibaCapture-ScreenCam.....	8
4.2	Camera configuration.....	8
5	Print function.....	10
6	Opening all cameras from an ibaCapture Server	11
7	AXIS cameras can be connected via HTTPS, self-signed certificates are accepted.....	12
8	Alternative Streams can be accessed through the RTSP server	13

1 General remarks

1.1 Licensing system WIBU CodeMeter is now the default

Starting with ibaCapture v5.0.0 WIBU CodeMeter licenses are supported, either as a CmDongle (USB) or as a CmActLicense (soft license).

Licenses for new ibaCapture v5 systems will be delivered as WIBU licenses.

Existing MARX USB Dongles will work with ibaCapture v5.0.x under the following conditions:

- Dongle is formatted with SmarxOS
- Licenses for ibaCapture v4 are enabled on the dongle
- The EUP date for ibaCapture is valid for the required EUP date of ibaCapture v5.0 or later versions

Time-limited evaluation licenses can be issued as soft licenses. Please note that activating time-limited soft licenses in a virtual machine is not possible. Time-limited licenses on USB-dongles are not affected by this restriction and can be passed to virtual machines as usual.

1.2 Migrating from ibaCapture v4 to ibaCapture v5

As soon as an order is placed to change or extend an ibaCapture v4 license, a license exchange is required. This will be done with the procedure described below.

License upgrade and migration from ibaCapture v4 to ibaCapture v5

ibaCapture v5 on WIBU uses new product licenses. During the process of adding to or changing the existing license, all existing license items will be migrated to the WIBU license container as well. Please provide your current MARX dongle number and a current support file from the system you want to upgrade. A support file for ibaCapture is generated via the Windows Start menu using the application "Support tool" from the ibaCapture folder.

When the order has been placed, the license migration will be done with the following steps. In the first step the existing ibaCapture license is changed into a time-limited license. During this change, a license-confirmation file will be created. This file needs to be sent to confirmation@iba-ag.com as a proof of the license change.

Once the confirmation file has been received by iba, the new permanent license for ibaCapture v5 will be delivered.

To avoid loss of functionality, the upgrade from ibaCapture v4 to v5 should be performed while the v4 license is still valid

Configuration impacts when upgrading from ibaCapture v4 to v5

Configurations from ibaCapture v4 should generally work without issues when loaded by ibaCapture v5.

If an ibaCapture v4 Server with enabled User Management is upgraded, please make sure to check that User Management is still active after the upgrade.

The password for the "admin" user is no longer stored in the dongle. ibaCapture v5 tries to determine whether the password is set in the MARX dongle. If ibaCapture is able to read it, the password should automatically be transferred to the new location.

However if this transfer fails for any reason, you need to set an admin password to enable User Management in ibaCapture again.

Please note that the length of the admin password was limited to 15 characters in the dongle. In ibaCapture v4.5.2 and earlier versions it was possible to enter longer admin passwords, though only the first 15 characters would be stored.

In any case, after updating to ibaCapture v5 an automatically transferred password will have a maximum length of 15 characters.

This restriction does not apply anymore to admin passwords that are set by ibaCapture v5.0.0 or later.

2 Support for the H.265/HEVC video codec

In version v5.0.0, ibaCapture supports recording and displaying video that is encoded in H.265. This codec is the successor of the widely used H.264, which has been supported in ibaCapture for a long time.

Currently, this new codec can be used for Axis, ONVIF and RTSP video sources. The video source has to provide video streams encoded in H.265.

For Axis cameras, the codec can be selected in the “Stream Encoding” drop-down list.

The screenshot displays the configuration interface of ibaCapture. On the left is a dark green sidebar with navigation links: 'Camera access', 'Video configuration', 'Streaming', 'Display settings', 'Overlay image', and 'PTZ Configuration'. The main area is white and contains several sections. The 'Camera Info' section shows 'Model: AXIS M2026-LE Mk II' and 'Firmware: 9.70.1.5'. The 'Network' section includes 'Transport protocol' (set to 'unicast RTP over RTSP over HTTPS (TCP)'), 'Network timeout' (3 s), 'Camera' (1), and a 'Show title text' checkbox. The 'Image Appearance' section shows 'Resolution' (2560x1440), 'Video rotation' (180), and 'Compression' (30%). The 'Video Stream' section, which is highlighted with a red box, contains 'Stream encoding' (set to 'h265'), 'GOP size' (30), 'Frame rate' (25 fps), 'Frame duration' (40,000 ms), an 'Enable frame rate monitoring' checkbox with an information icon, 'Watchdog interval' (5 min), and 'Watchdog threshold' (60%).

For Onvif devices, the codec can be set in the encoder profile. How this looks exactly depends on the camera.

Some RTSP sources allow adding arguments to the stream URL. Information about whether and how this works needs to be provided by the camera manufacturer.

For playback of H.265 video, at least v5.0.0 of ibaCapture Server and ibaCapture Player is required.

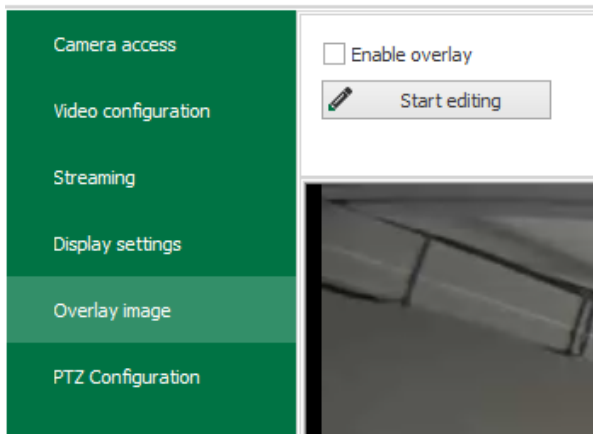
3 Overlay images

This new feature allows displaying a static image over the current video feed. It can be used to achieve privacy masking or to display calibration/orientation information within the image.

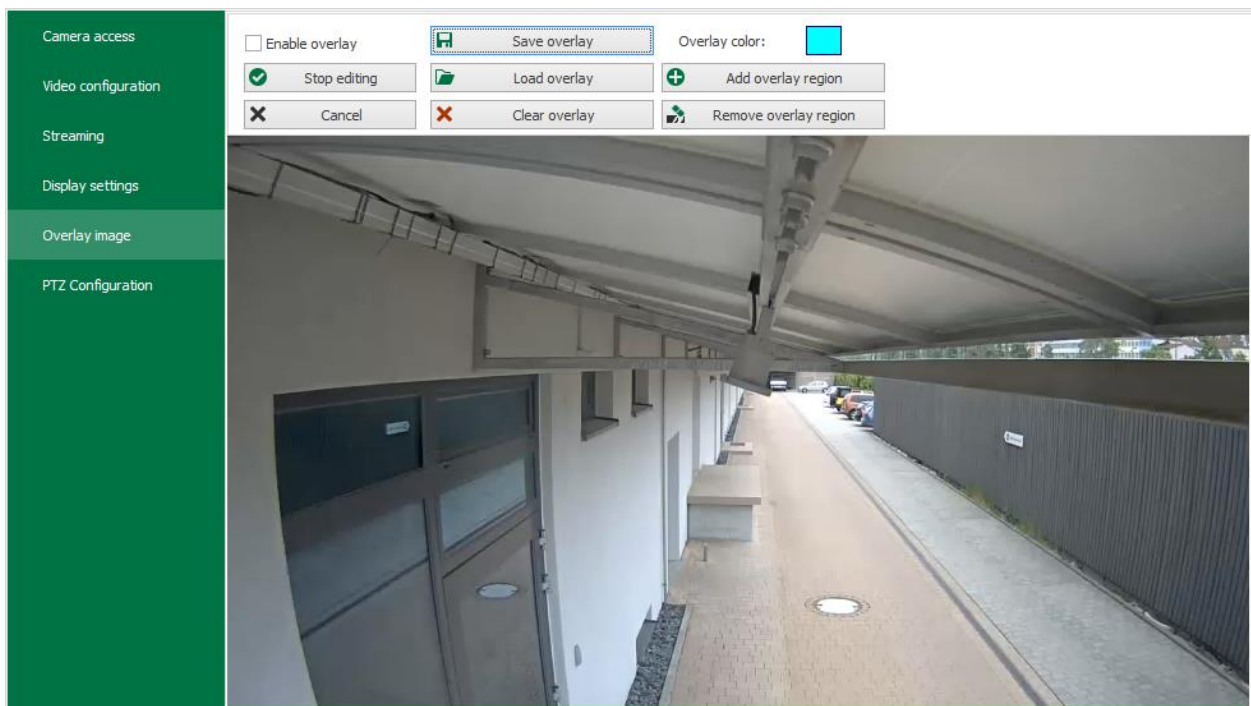
Due to the technical implementation, there are certain restrictions for ibaCapture functions when an overlay image is enabled. These will be explained later in this document.

3.1 Configuring an overlay image

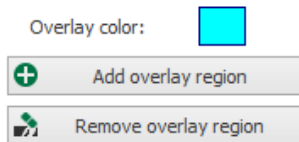
In the camera settings, the new node “Overlay image” has been added. Overlays can be enabled and edited here.



At first, the overlay preview is active. To edit the overlay, click “Start editing”. The camera image will then be shown with a still image in its original size. For large resolutions, it may be required to use the scroll bars to see the whole image.



The overlay can now be created by using these controls:



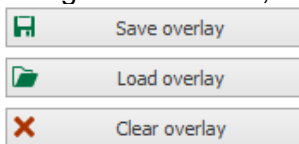
The overlay color can be selected by clicking the color field.

Overlay regions generally are created as polygons by defining the corners. To define a corner, click into the image at the desired position. To abort region creation, click the “Cancel” button that will be shown once region creation is active.

Once all corners are defined, click “Apply” to create the region.

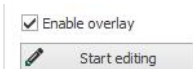
In “Add” mode, the polygon will be painted over the image in the selected color. In “Remove” mode, the area of the created polygon will be removed from the overlay. As a result, the camera image will be visible in this region.

Using these buttons, the overlay can be loaded, saved and cleared.



Overlay images are saved as PNG images with alpha-channel transparency. Existing PNG images can also be loaded. The alpha-channel is evaluated for transparency.

Once the mask has been created as desired, click “Stop editing”. The created overlay will then be shown over the live view video.



To generally enable the overlay image for all clients, make sure that the “Enable overlay” checkbox is checked. The ibaCapture Server configuration needs to be applied for this change to take effect.

3.2 Restrictions with enabled overlay

The main use for image overlays is the creation of privacy masks. As the received video streams are not modified after they are received by ibaCapture Server, video from potentially sensitive areas is still stored. It will only be masked when video is displayed by ibaCapture Player.

To avoid sensitive areas being visible, the following functions of ibaCapture are restricted for cameras with overlay enabled:

- RTSP Server
- Video Export

Please also note that without enabling user management, every user with access to the ibaCapture Server will be able to disable the overlay.

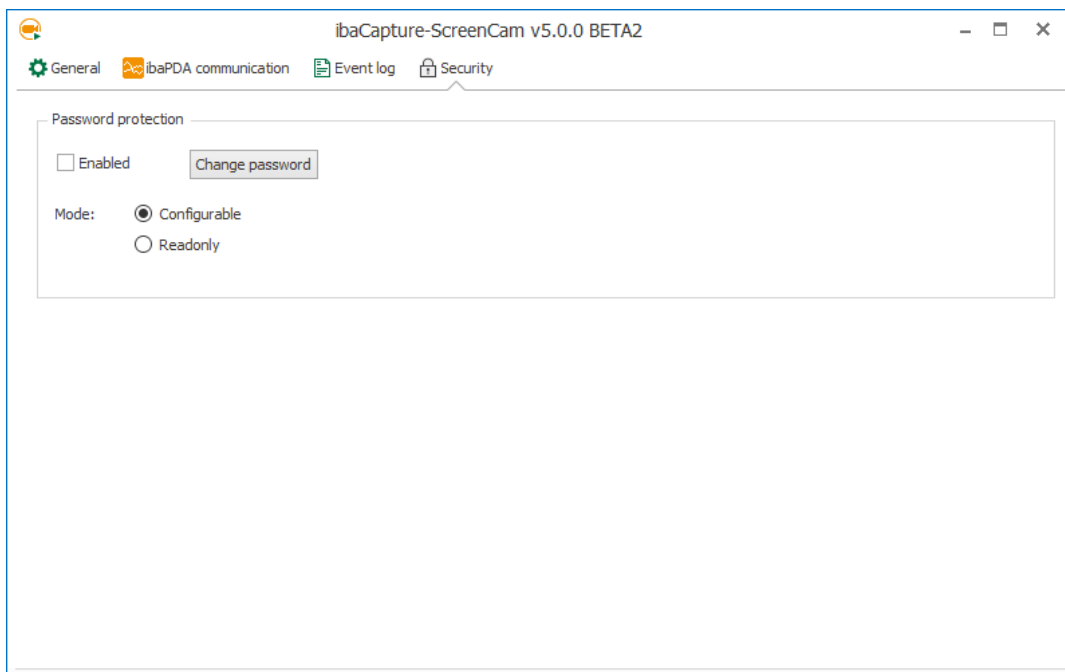
4 Support password-protected ibaCapture-ScreenCam instances

Up until now it has always been possible to access the screen through ibaCapture-ScreenCam instances in the network.

Starting with ibaCapture-ScreenCam v5 it is possible to set a password. This password protects the instance settings of ibaCapture-ScreenCam and restricts access to the screen. Only after the password has been entered, it is possible to record from a protected ibaCapture-ScreenCam instance.

4.1 Setting in ibaCapture-ScreenCam

In ibaCapture-ScreenCam a new “Security” tab has been added.



Click on “Change password” to create or change the password. Here in ibaCapture-ScreenCam only one account with the username “admin” is supported.

Once a password has been set, the “Enabled” checkbox will be checked. In this state, screen recording from this system only works after entering the correct password. The ibaCapture-ScreenCam instance now also can only be exited by entering the correct password.

To protect the local configuration, the mode can be switched between “Configurable” and “Readonly”. To switch from “Readonly” to “Configurable”, it is also necessary to enter the password.

4.2 Camera configuration

The camera settings in ibaCapture Manager now have a password field where the ScreenCam password can be entered.

Step 2: Camera settings (ibaCapture-ScreenCam)

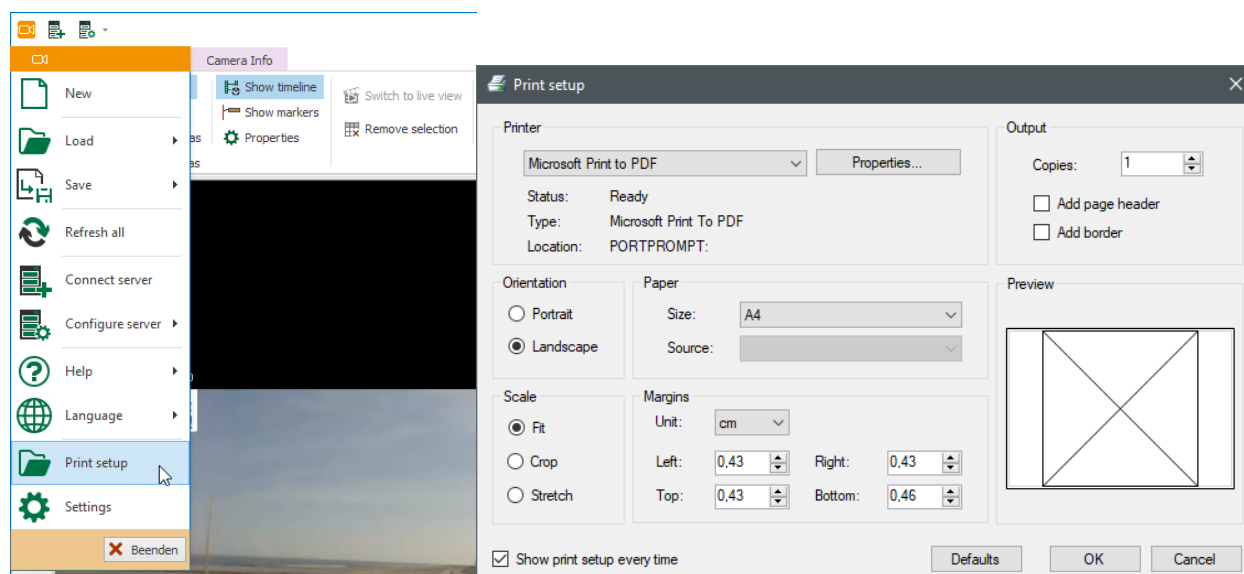
The screenshot shows the 'Camera identification' section of the ibaCapture v5.0.0 settings. A green sidebar on the left contains menu items: Configuration, Streaming, Display settings, Overlay image, and PTZ Configuration. The 'Camera identification' section includes fields for Host address (iba-fue-note569), Host port (9191), Camera name (Screencam 1), and Password (*****). A 'Check password' button is next to the password field. Below these fields is a table titled 'Discovered HMI cameras' with columns: Camera Name, Computer Name, IP Address, Source Port, Version, and Status. The table contains one entry: Screencam 1, iba-fue-note569, 127.0.0.1, 9700, 5.0.0.0, and Available. At the bottom of this section are 'Discover network' and 'Cancel' buttons. The 'Video Settings' section below shows Frame rate (5 fps), GOP size (30), and a Quality slider from Lowest to Lossless, currently set at 'Good'.

Camera Name	Computer Name	IP Address	Source Port	Version	Status
Screencam 1	iba-fue-note569	127.0.0.1	9700	5.0.0.0	Available

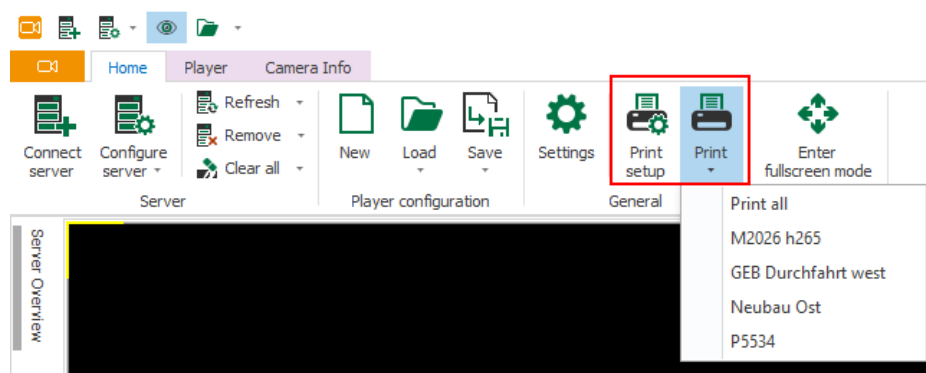
Another change in ibaCapture v5.0.0 is that discovered ScreenCam instances will only be selected by double-clicking on the entry. This should avoid accidental changes to existing configurations.

5 Print function

Still images from single cameras or camera layouts in ibaCapture Manager can now be printed. A “Print setup” dialog is available, e.g. from the main menu.



Apart from the standard printing settings, this allows setting the Orientation, Scale and Margins. The Preview will give an indication of how the camera images will be printed on the selected paper and how the settings affect this.

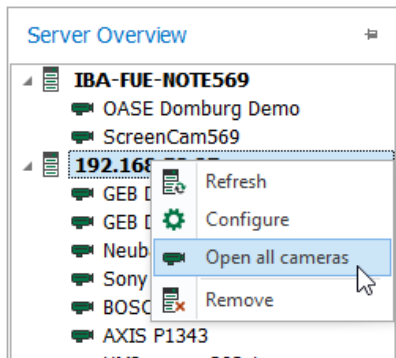


To actually print, select the “Print” control from the “Home” ribbon. When “Print all” is selected, the currently visible camera layout will be printed. In the drop-down list, all open cameras will be listed. To print an individual camera image, select the camera name from the list.

The print function can also be called from the player context menu.

6 Opening all cameras from an ibaCapture Server

For all ibaCapture Servers in the Server Overview it is now possible to open all connected cameras.



Open the context menu of the server and select “Open all cameras”. All active cameras from the selected ibaCapture Server will be added to the camera view.

7 AXIS cameras can be connected via HTTPS, self-signed certificates are accepted

In the video configuration of AXIS cameras, it is possible to select the desired transport protocol from a list of available options.

▼ Camera Info

Model: **AXIS P1425-LE**

Firmware: **5.80.1.2**

▼ Network

Transport protocol: unicast RTP over RTSP (TCP) ▼

Network timeout: unicast RTP (UDP unicast)

Camera: unicast RTP over RTSP (TCP)

☐ Show title text

▼ Image Appearance

unicast RTP over RTSP over HTTPS (TCP)

If there is a requirement for the video stream to be encrypted, it is possible to select any option that includes transport over HTTPS.

Starting with ibaCapture v5.0.0, ibaCapture Server now also accepts self-signed certificates that are enabled on AXIS cameras by default.

8 Alternative Streams can be accessed through the RTSP server

The Add-On RTSP Server allows playing video streams from ibaCapture Servers on 3rd-party software or devices.

This feature has now been extended to also allow access to the defined alternative streams through RTSP. To access an alternative stream, replace “live” in the RTSP URL with either “alt1” or “alt2”.

An example URL when using the default port 8554 would look like this:

`rtsp://<IP-address of ibaCapture Server>:8554/<Camera Name>/alt1`

for alternative stream 1.