

User manual

AXIS Optimizer Body Worn Extension

AXIS Optimizer Body Worn Extension

AXIS Optimizer Body Worn Extension is an application that enables the connection between the Axis body worn system and Milestone XProtect[®]. Data transferred from the Axis body worn system includes video, audio, searchable location, categories, and notes.



How does it work?

The Axis body worn solution consists of at least one Axis body worn camera, an Axis docking station, an Axis system controller, and a content destination, in this case Milestone XProtect[®]. The solution can also include an AXIS Body Worn Live Self-hosted Server device. AXIS Body Worn Manager is the web application that lets you configure and manage your body worn system.

When you add a new user in the Axis body worn system, a new hardware, corresponding to the new user, is created in XProtect[®]. Each user in the body worn system uses one license in XProtect[®].

When you place the Axis body worn camera in the docking station, the recording transfers start automatically. It takes a while before the recordings can be viewed in the XProtect[®] Smart Client. You can monitor the status of the file transfers in AXIS Body Worn Manager.

The beginning of each recording has a bookmark. The bookmark, shown in XProtect[®], contains the following information:

- camera name
- activation method, for example if the recording was started using the button or by fall detection
- any location data
- any annotations from the category and notes created in AXIS Body Worn Assistant

AXIS Optimizer Body Worn Extension

System modes

AXIS Optimizer Body Worn Extension lets you choose between two system modes when setting up the connection with Milestone XProtect[®].

User-centric system mode (recommended)

- Each hardware device in Milestone XProtect represents a body worn user.
- One user in the body worn system results in one Milestone XProtect license.
- Control permissions on the user level.
- Search recordings based on user.
- Add, remove, or replace body worn cameras in the body worn system without affecting the structure in Milestone XProtect.
- Replacing a body worn user results in a new hardware device in Milestone XProtect.

Device-centric system mode

- Each hardware device in Milestone XProtect represents a body worn camera.
- One camera in the body worn system results in one Milestone XProtect license.
- Control permissions on the camera level.
- Find user information related to recordings in metadata or bookmarks.
- Add or remove body worn users without affecting the structure in Milestone XProtect.
- Replacing a body worn camera results in a new hardware device in Milestone XProtect.

Note

If you're migrating a system, select the same system mode that you're currently using.

System requirements

- Milestone XProtect® 2020 R1 Corporate or newer versions, or
- Milestone XProtect[®] 2020 R1 Professional+ or newer versions, or
- Milestone XProtect[®] 2020 R1 Expert or newer versions
- Siemens Siveillance[®] 2020 R1 Video Pro, or
- Siemens Siveillance® 2020 R1 Video Advanced, or
- Siemens Siveillance[®] 2020 R1 Video Core Plus
- At least 10 GB of free disk space.

Important

Always use the latest XProtect hotfixes and cumulative patch installers.

Get started

Get started

- 1. Install AXIS Optimizer Body Worn Extension.
- 2. Set up the connection.
- 3. Connect to the Axis body worn system.

Install AXIS Optimizer Body Worn Extension

- 1. On the Milestone XProtect[®] Recording Server, run AxisOptimizerBodyWornExtensionSetup.exe.
- 2. Follow the instructions in the setup wizard.

Note

- A firewall rule is added to the recording server during installation to allow incoming traffic on port 55771.
- The XProtect Recording Service will restart during installation.

Set up the connection

- 1. Right-click the application icon 🔛 in the taskbar.
- 2. Select Open connection setup.
- 3. Select system mode. For more information, see *System modes on page 2*. To change the system mode at a later time requires a full system reset.
- 4. Enter the address for the Milestone XProtect[®] Management Server.
- 5. Enter the Milestone XProtect® administrator account credentials.

Note

We recommend that you use a separate XProtect $^{\circ}$ administrator account when you set up the connection with the Axis body worn system.

- 6. Click Login.
- 7. Select a **Certificate** installed on your machine. Alternatively, click **Create a self-signed certificate** to create one, and then select it.

Note

- You need to set up a server certificate to secure the communication with the Axis body worn system. The selected certificate must contain a SAN (Subject Alternate Name) field, including a DNS name or IP address that identifies the recording server.
- If you're using Windows Server 2012 R2 you must manually create the certificate.
- 8. Click Create connection file.

Important

- The connection file contains information that enables data to be pushed to your Milestone XProtect[®] system. We recommend that you store the connection file in a secure location. Alternatively, delete the connection file permanently after you have set up the connection between the Axis body worn system and Milestone XProtect[®].
- To maintain a stable connection between the Axis body worn system and Milestone XProtect[®], we recommend that you use a DNS name for the Milestone XProtect[®] Recording Server.

Get started

Connect to the Axis body worn system

Note

Make sure that you use the latest firmware for the Axis body worn system.

- 1. Access the Axis body worn system using a web browser.
- 2. Follow the instructions in the setup wizard.
- 3. In the **Content destination** step, upload the connection file that was generated by AXIS Optimizer Body Worn Extension.

For more help about setting up and using the Axis body worn system, go to Axis body worn solution help center.

Configure your system

Configure your system

Retention time

Change the retention time in Milestone XProtect®

To avoid losing recordings, we recommend changing the retention time in XProtect® to a higher value.

Using the default retention time of 7 days causes all recordings older than 7 days to be permanently deleted when uploaded from the body worn camera to XProtect[®].

Control retention time with categories

You can add a category for a video in AXIS Body Worn Assistant (mobile application for recording categorization and annotation). In AXIS Optimizer Body Worn Extension, you can specify a retention time for a category. This generates an **Evidence Lock** for the category in Milestone XProtect[®] Smart Client.

To set the retention time for a category:

- 1. Right-click the application icon 👪 in the taskbar.
- 2. Select Settings.
- 3. Enter a Retention time (days) for any of the existing categories, or
- 4. Click + to add a new category, choose a category from the drop-down, and enter a Retention time (days) for the added category.

Note

- Retention time is the time from when the recording was created until it is automatically deleted.
- The retention time set in AXIS Optimizer Body Worn Extension guarantees a minimum retention time. It may be longer if set to a higher value in the storage configuration for the recording server or device in XProtect[®].
- If you leave Retention time (days) set to <default>, an Evidence Lock is not created.
- The retention time setting requires Evidence lock support, which is only supported on XProtect[®] Corporate and Siveillance[®] Video Pro. The setting is not available for any other product.

Connect to AXIS Body Worn Live Self-hosted

Before you start

Set up AXIS Body Worn Live Self-hosted and connect it to your body worn system according to the instructions in Get started.

- 1. Right-click the application icon 🔛 in the taskbar.
- 2. Select Open connection setup.
- 3. Under AXIS Body Worn Live Self-hosted Server, enter the address, username, and password for the Live Self-hosted Server device.
- 4. Click Connect.

Record the live stream

By recording the live stream, you can access recordings immediately instead of waiting until the camera has been docked and the recordings have been uploaded. Make sure that recording is turned on for the camera in the VMS. We recommend that you set up a rule to always record the live stream.

Configure your system

Trigger an event when a live stream starts

To be able to create a rule or an alarm definition with Live Stream Started as a predefined event:

- 1. In Management Client, go to Site Navigation > Recording Servers and select the camera.
- 2. Go to the Events tab.
- 3. Click Add.
- 4. Select Live Stream Started.
- 5. Click OK.

Note

If Live Stream Started doesn't turn up when you try to create a rule, you can perform an Updated hardware operation on the hardware in Milestone XProtect[®].

Offload corrupt recordings automatically

If a camera has issues that result in corrupt timestamps on recordings, it can be difficult to offload the files to Milestone XProtect[®]. You can set up the system to automatically offload such recordings to a folder on the recording server. Whenever files are offloaded to the folder, you get an alarm in the VMS.

To set up automatic offloading of corrupt recordings:

- 1. Right-click the application icon \blacksquare in the taskbar.
- 2. Select Settings.
- 3. Under Corrupt recordings, turn on Automatically offload corrupt recordings.
- 4. Select the location for storing the files.
- 5. Select the number of days to save the files.

Maintenance

Maintenance

Remove a user from the system

1. Remove the user in AXIS Body Worn Manager.

Note

The user device is disabled in XProtect, and the channel license is released. It's no longer possible to view recordings by the user, but the recordings are still intact. To access them, enable the device.

2. Delete the device in XProtect[®] when you no longer need the recordings made by the user.

Important

Never remove an enabled device in XProtect[®]. Always remove it from AXIS Body Worn Manager first.

Create a new self-signed certificate

To create a new self-signed certificate:

- 1. Right-click the application icon 🖺 in the taskbar.
- 2. Select Open connection setup.
- 3. On the current certificate, click \mathbf{x} to reset the certificate binding.
- 4. Click Remove current self-signed certificate.
- 5. Click Create a new self-signed certificate.
- 6. Select the new certificate.

Migrate to a new server

- 1. Export users from the body worn system, see Export users.
- 2. Install AXIS Optimizer Body Worn Extension on the new Milestone XProtect recording server, using the same system mode as for the old server, see *System modes on page 2* for more information.
- 3. Move camera hardware objects from the old Milestone recording server to the new Milestone recording server.
- 4. Create a new connection file on the new Milestone XProtect recording server, see Set up the connection on page 4.
- 5. Upload the connection file to the body worn system in AXIS Body Worn Manager.

Troubleshooting

Troubleshooting

The taskbar icon turns red to indicate that something is wrong. Right-click the taskbar icon and select **Show error information** to see details about the problem.

In the Management Client you can check the statuses of all devices. Each hardware consists of one camera, one microphone, and one metadata device. The status descriptions aren't valid for the metadata device. It's always green except when there is an error. The different statuses are:

Green - Okay, active live stream.

Yellow with tooltip "Connection is broken" - Okay, no active live stream.

Yellow with tooltip "Invalid license" - Not okay, resolve license issues in the VMS.

Blue/missing – Bad, try to refresh the device by doing a Replace hardware operation on the device's hardware in the VMS. Contact support if the device status remains.

Problem	Symptom	Probable cause and solution
Can't connect to the Axis system controller	The web interface of the Axis system controller says: "Connection failed"	 Check the taskbar icon to make sure that the AXIS Optimizer Body Worn Extension is running. Make sure the PC can be reached from the Axis system controller and that there are no firewalls blocking traffic on port 55771
Recording transfer error	 An alarm in Milestone XProtect says: "Recording transfer error" The taskbar icon shows that something is not working. Can't find recordings or bookmarks in Smart Client. 	 Sometimes it can take a while for the recordings to transfer. If there is no alarm, wait. Open XProtect Management Client Check that XProtect Recording Server is running. Check that the Axis body worn device is working and is enabled. Check that the Axis body worn device has a valid license.
Recording is incomplete	Parts of the recording are missing in Smart Client.	Recordings are transferred in chunks, and not necessarily in chronological order. A bookmark is created at the beginning of the recording as the last step of a transfer. If no bookmark is found, the transfer is most likely not yet completed. Wait for the transfer to finish.

Troubleshooting

Problem	Symptom	Probable cause and solution
Recording is missing	I can see a bookmark in Smart Client but there is no recording.	 Check the recording and archiving configuration for the XProtect Recording Server. If the transferred recording is older than the retention time it will be deleted directly when transferred. Check retention time set for the different categories under Settings in AXIS Optimizer Body Worn Extension. Check free space of the storage used by the XProtect Recording Server. If there is less than 5 GB is left on the disk, auto-archiving will start, which may result in lost recordings regardless of retention time/size.
No search results for Location data in Milestone XProtect®	Location data is not searchable for users added in version 1.0.	Upgrade to version 1.1 or higher and create new users in the body worn system.
	GPS coordinates are not shown in bookmark descriptions in Milestone XProtect [®] because Location data is not enabled in the body worn system.	Refer to the <i>body worn solution user manual</i> for information on how to enable and use Location data.
Connection lost between the body worn system and Milestone XProtect®	IP address changed on the Milestone XProtect [®] recording server.	 Manually create and select a new Windows certificate in Optimizer Body Worn Extension, see Create a new self-signed certificate on page 8 Create a new connection file in AXIS Optimizer Body Worn Extension, see Set up the connection on page 4. Upload the new connection file in AXIS Body Worn Manager.
Corrupt recording detected	An error message in Milestone XProtect says: "Corrupt recording detected".	Set up the system to automatically offload corrupt recordings to a separate folder on the recording server. For instructions, see <i>Offload corrupt</i> <i>recordings automatically on page 7</i> .
Original live recording missing		 When the recording has been uploaded to Milestone after docking the camera, the original live recording is no longer shown in the Smart Client. To see or export the original live recordings (only available in Milestone XProtect[®] 2023 R2 or later) : In Management Client. go to Site Navigation > Recording Servers and select the camera. Go to the Streams tab. Clear Use edge recordings. To make sure the change takes effect, restart the Smart Client. When you no longer need the live recordings, select Use edge recordings again.

Note

After fixing a problem it can take a while for the system to transfer the recording, and for the taskbar icon to turn green. Restart the system controller to speed up the transfer.

Need more help?

Need more help?

Contact support

If you need more help, go to axis.com/support.

To help finding a quick solution, provide logs. To get the logs:

- 1. Right-click the application icon 🖳 in the taskbar.
- 2. Select Save logs.

User manual AXIS Optimizer Body Worn Extension © Axis Communications AB, 2020 - 2025 Ver. M10.2 Date: March 2025 Part no. T10149228