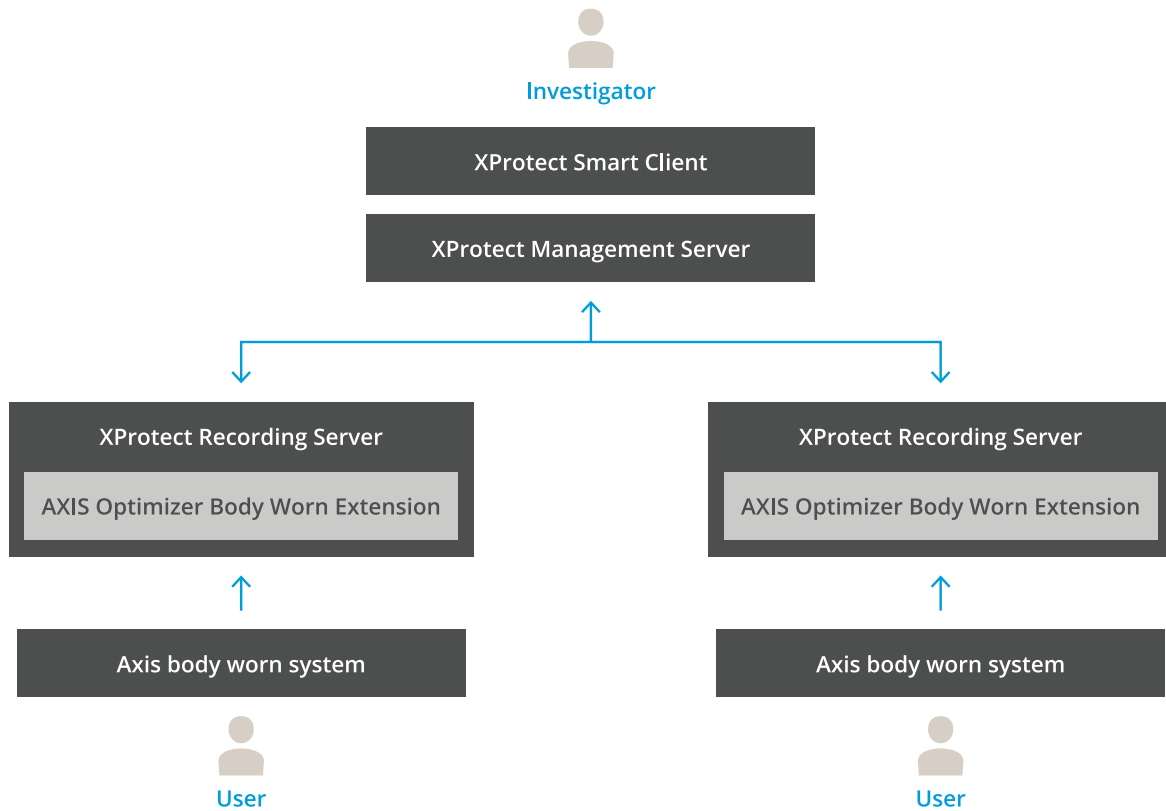


# AXIS Optimizer Body Worn Extension

## 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

### 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 R2 Corporate or newer versions, or
- Milestone XProtect® 2020 R2 Professional+ or newer versions, or
- Milestone XProtect® 2020 R2 Expert or newer versions
- Siemens Siveillance® 2020 R2 Video Pro, or
- Siemens Siveillance® 2020 R2 Video Advanced, or
- Siemens Siveillance® 2020 R2 Video Core Plus
- At least 10 GB of free disk space.

#### Important

You must always download and apply the latest XProtect hotfixes and cumulative patch installers.

### 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. In **VMS connection > Management server**, enter the address for the Milestone XProtect® Management Server.

#### Note

We recommend that you use a separate XProtect® administrator account when you set up the connection with the Axis body worn system.

5. If the Milestone XProtect® administrator account is a Basic user, turn off **Windows authentication**.
6. Enter the **Username** and **Password** for the Milestone XProtect® administrator account.
7. Click **Login**.

#### 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. Select a certificate:
    - To use a certificate that's already installed on your machine, click **Certificate** and select it.
    - To create a new certificate, click **Create a self-signed certificate**. The certificate will be called **AXIS Optimizer Body Worn Extension**, and you find it in **Windows Security – Certificate selection > More choices**.

#### 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.
9. Click **Create connection file**.

### 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

#### 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 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.

##### 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  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

#### 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 **✘** 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

When there is something wrong with the system, the application icon  in the taskbar turns red. In many cases this means there is an issue with a specific recording, user, or camera, and that the system can still transfer recordings for all other body worn users or cameras.

Right-click the application icon  and select **Show error information** to see details about the problem.

In Management Client you can check the statuses of all hardware devices. Each hardware device represents either a body worn user or a body worn camera, and 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"	<ul style="list-style-type: none"> <li>• Check the taskbar icon to make sure that the AXIS Optimizer Body Worn Extension is running.</li> <li>• Make sure the PC can be reached from the Axis system controller and that there are no firewalls blocking traffic on port 55771</li> </ul>
Recording transfer error	<ul style="list-style-type: none"> <li>• An alarm in Milestone XProtect says: "Recording transfer error"</li> <li>• The taskbar icon shows that something is not working.</li> <li>• Can't find recordings or bookmarks in Smart Client.</li> </ul>	<ul style="list-style-type: none"> <li>• Sometimes it can take a while for the recordings to transfer. If there is no alarm, wait.</li> <li>• Open XProtect Management Client                             <ul style="list-style-type: none"> <li>– Check that XProtect Recording Server is running.</li> <li>– Check that the Axis body worn device is working and is enabled.</li> <li>– Check that the Axis body worn device has a valid license.</li> <li>– In Management Client, right-click the hardware device and select <b>Replace Hardware</b>. This refreshes the device but doesn't remove it.</li> </ul> </li> </ul>
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

Problem	Symptom	Probable cause and solution
		most likely not yet completed. Wait for the transfer to finish.
Recording is missing	I can see a bookmark in Smart Client but there is no recording.	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Check retention time set for the different categories under <b>Settings</b> in AXIS Optimizer Body Worn Extension.</li> <li>• 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.</li> </ul>
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.	<ol style="list-style-type: none"> <li>1. Manually create and select a new Windows certificate in Optimizer Body Worn Extension, see <i>Create a new self-signed certificate, on page 8</i></li> <li>2. Create a new connection file in AXIS Optimizer Body Worn Extension, see <i>Set up the connection, on page 4.</i></li> <li>3. Upload the new connection file in AXIS Body Worn Manager.</li> </ol>

Problem	Symptom	Probable cause and solution
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 recordings automatically, on page 7</i> .
Original live recording missing		<p>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) :</p> <ol style="list-style-type: none"> <li>1. In Management Client, go to <b>Site Navigation &gt; Recording Servers</b> and select the camera.</li> <li>2. Go to the <b>Streams</b> tab.</li> <li>3. Clear <b>Use edge recordings</b>.</li> <li>4. To make sure the change takes effect, restart the Smart Client.</li> <li>5. When you no longer need the live recordings, select <b>Use edge recordings</b> again.</li> </ol>

**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?

### Contact support

If you need more help, go to [axis.com/support](https://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.



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