AXIS Camera Station Solution Troubleshooting Guide

User Manual

AXIS Camera Station Solution Troubleshooting Guide

Overview

The guide describes how to troubleshoot a solution based on AXIS Camera Station. It will help you as a system integrator, to help your customer if needed.

Troubleshooting is a form of solving problems. In short, the process begins by trying to identify the symptoms of the problem. Then you isolate the part or parts that may be causing the issue. You test to configure or change and then evaluate, continuously in order to find a solution to your problem. Sometimes reproducing the problem can be a way of finding your solution.

AXIS Camera Station

Installation

AXIS Camera Station installation fails with following error:

Windows Media Player could not be found. Please make sure that the 64-bit version is installed.

On Windows Server, additional components are sometimes necessary. Check which OS is used.

- Windows Server 2016: Install version with Desktop Experience.

- Windows Server 2008 and 2012: Activate Windows Desktop Experience.

- Windows Server 2003: *Install Windows Media Format 9.5 Software Development Kit (SDK) x64 Edition.*

This program does not support the version of Windows your computer is running.

The Windows Service pack is not the latest installed. Install the latest service pack.

32-bit Windows is no longer supported

Windows 32-bit is installed on the computer. This is no longer supported. Install Windows 64-bit.

Service won't start or restarts often

The server does not start

Escalate the issue to Axis Support. See *Escalation process on page 11*.

The server restarts often

The server can be overloaded which causes long task queue.

- Investigate whether other application or services were running that overloaded the disk, e.g. anti-virus, disk management etc.

- If not, escalate the issue to Axis Support. See *Escalation process on page 11*.

Recommendation:

In general, it's not a good practice to record to the same disk where the operating system is located. Split the disk into to two partitions for example and use one for OS, the other for recording. Best is to record to another physical disk. This will help maintain general system stability and achieve better performance, while avoiding fragmentation and bottlenecks.

Client cannot connect to the server

The client is not able to connect to the server and error message is displayed.

- Verify that the OS is supported.

    - Check the AXIS Camera Station *release note* for a full list of supported OS. For example, Home edition would not work since it does not support Windows Authentication.

- Verify that AXIS Camera Station server is running.

    - Start the server from Service Control.

- Verify that the client and the server are connected to the same network.

    - If not, the client should use the server's external IP address.

- Check if there is a proxy server between the server and the client.

  - Configure the proxy in Service Control.

- Check if there is a proxy server between the server and the client.

  Configure the proxy for the client.

  - At the log in page, in the left lower corner, select **Change proxy settings**.

  - Or configure it in the Windows Internet Options and select to use the default option in **Change Proxy settings**.

Device cannot be added

If the device cannot be added to AXIS Camera Station, try to add the device to AXIS Device Manager.

- If it is not possible, troubleshoot the camera. See *Camera on page 15*.

- Is it possible to add another device model?

  - If the device is a new product or has a newly released firmware, it can be a compatibility issue. Make sure to use the latest AXIS Camera Station/AXIS Device Manager.

Lost connection to the camera

Under **Configuration > Management**, the camera status change to `Password type:  unencrypted`.

- The cameras password type has been change to `encrypted only` in the cameras webpage.

  - Once been added to AXIS Camera Station, the password type should not be change. The Server cannot communicate with the camera after the change.

  - Even if correct password is entered in AXIS Camera Station for the camera, the VMS cannot communicate with the camera.

  - If another password type is required, the camera must be removed from AXIS Camera Station and then added again. Note that all the cameras recordings will be lost.

Live view performance

Client Hardware

Open the DirextX Diagnostic Tool (search for dxdiag on the computer).

Verify that the graphic card's or network adapter's driver is up to date.

- Check on the manufacture's website if the driver is the latest for this OS.

Client and Server running on the same machine.

- Try to run the client on a dedicated computer.

Maximum number of monitors.

- With internal graphic card, no more than two monitors per graphic card is recommended.

- With dedicated graphic card, see *Hardware Guidelines.*

Virtual Machine is not supported for the client.

Camera Overload

Many clients connected at the same time.

- Ask the customer for their typical use case.

Other VMS client than AXIS Camera Station connected to the camera.

- Disconnect the camera from the other client and restart it.

Many different streams being used from the same camera, especially high resolution.

- Could be a problem especially for some M-Line cameras.

- Stream with same profile or lower resolution.

Server Overload

Abnormal CPU/RAM usage corresponding to the same time as the issue.

- Make sure no other CPU/RAM consuming application is running at the same time.

Network issue

Abnormal bandwidth usage corresponding to the same time as the issue.

- Make sure no other bandwidth consuming application is running at the same time.

Enough bandwidth / Remote or local network

- Check network topology.

- Health check on any network deice (switch/router/network adapter/cable) in use between cameras, server and client.

Cannot update device firmware through AXIS Camera Station

If it is not possible to upgrade the camera from its webpage:

- Troubleshoot the camera. See *Camera on page 15*.

Firmware cannot be upgraded for all devices:

- Check the network connection.

- If not network connection issue, escalate to AXIS Support. See *Escalation process on page 11*.

Firmware cannot be upgraded for specific models:

- Can happen for new products and strange firmware.

- Escalate the issue to AXIS Support. See *Escalation process on page 11*.

No video stream

No video stream can be played in AXIS Camera Station although other functions work fine.

- First check the following:

  - *Camera on page 15*
  - *Antivirus on page 7*
  - *Firewall on page 7*
  - *Latest AXIS Camera Station on page 8*

- Windows Server OS, make sure the Desktop Experience is installed.

    - Windows Server 2016: install version with Desktop Experience.

    - Windows Server 2008 and 2012, see this *FAQ* for more information.

    - Windows Server 2003, suggest the customer to install Windows Media Format SDK. See the *Windows Media Downloads* page.

- Does lower resolution stream work?

- H.264 streaming issue

    - Check if windows media player is fully installed.

        Try to open a video stream from Windows Media Player with the methods below. (Make sure to enter the actual IP of the camera in each command):

        Unicast via RTP: `axrtpu://<ip>/axis-media/media.amp`

        Unicast via RTSP: `axrtsp://<ip>/axis-media/media.amp`

        Unicast via RTSP, tunneled via HTTP: `axrtsphttp://<ip>/axis-media/media.amp`

        Windows Media Player is used for verifying that all required components used by AXIS Camera Station are installed on the computer.

If none of the above helps, escalate the issue to AXIS Support. See *Escalation process on page 11*.

Recording doesn't start

Recordings do not start or stop after a few seconds.

- It could be that the disk is full or that there is too much intruding data.

    - Check the "Camera Recording Storage" in the Server Configuration Sheet and make sure there is free space and no intruding data.

    - Increase storage limit for AXIS Camera Station.

    - Add more storage to the installation.

Recording gaps during Continuous recording

Along with gaps, AXIS Camera Station alarms shows "Recording errors".

The gaps can occur for several reasons, such as:

- Server overload

- Network issue

- Camera overload

- Disk overload

See *Live view performance on page 4*.

If the disk is the bottleneck, add more disks, split the cameras to record on more disks. You can also reduce the amount of data written on the disk (Video settings, FPS, resolution, H.264...)

In general, it is recommended not to record more than 10 cameras in 1080p per physical hard drive in H.264. This recommendation is a general rule of thumb. The bottleneck is mostly imposed by your storage hardware, but keep in mind the throughput estimated by *AXIS Site Designer Tool*.

Happens on all the cameras?

- If not, check if the *Camera on page 15* is overloaded.

Questions that will help to sort things out:

- How often is the gap, every hour or every day?

- How long is the gap, seconds or hours?

- At what time does the gap happen?

Failover recording issues

The failover recording is not recording on the Server after the connection is restored.

Possible causes:

- That the bandwidth between the camera and the server is not sufficient for the recording to be transferred.

- Camera was not recording to the SD card during the disconnection.

  - Check the camera's server report. See *Camera on page 15*. Make sure the SD card is working fine and there is recording on it.

- The camera time has changed/shifted since the disconnection.

  - Make sure the NTP is synchronised correctly for future recordings. Synchronize camera's time with the server or setup the same NTP server on the camera as on the server.

The failover recording implementation in AXIS Camera Station was not designed to handle the following use cases:

- Controlled server shutdowns

- Short interruptions less than 10 seconds in the connection

Antivirus

Disable or allowlist AXIS Camera Station in the antivirus, see this *FAQ* for more information.

To check if there is any antivirus running, open the AllServices.txt file, found in the AXIS Camera Station system report. Search by commonly used antivirus software: Avira, AVAST, AVG, ESET security, Kaspersky, McAfee, NOD32, Norton, Panda, Trend Micro, Sophos, etc.

Note

> Many customers believe they have disabled the antivirus. Confirm it's closed through the Windows control panel and stop the antivirus process using Windows Task Manager.

Firewall

Check if there is any firewall running in AllServices.txt, found in the AXIS Camera Station system report.

Make sure the ports 55752(HTTP) and 55754(TCP) AXIS Camera Station uses are opened on the server (and router if any), see this *FAQ* for more information.

Or exclude anything Axis related in firewall settings. AXIS Camera Station 5 can automatically exclude itself from Windows Firewall if selected during the installation wizard.

Database problem

If the server is constantly restarting or it not possible to start the server, it can be due to a database corruption.

Escalate the issue to Axis Support. See *Escalation process on page 11*.

Note

Make sure to include the database files in the system report.

Latest AXIS Camera Station

Before upgrade, back up ACS.FDB, ACS_LOGS.FDB, and ACS_RECORDINGS.FDB, located in `C:\ProgramData\Axis Communications\AXIS Camera Station Server` and copy it to somewhere else.

System report

AXIS Camera Station system report should be generated directly after the issue happens.

Make sure the system report is generated from the client or server where the issue has been reproduced.

Observe that generating a system report via remote desktop will retrieve hardware information from the computer where remote desktop is being used. Avoid remote desktop if possible.

Only include database files if needed, this will reduce the uploading time.

When AXIS Camera Station Client or Server cannot be started, you can get a partial system report by open the AXIS Camera Station Service Control and from the Tools tab selecting **Run** under System report.

All cameras' server report are added to the AXIS Camera Station system report automatically, if it is available or accessible by the AXIS Camera Station server.

AXIS Camera Station Mobile app – Android & iOS

Go to the *FAQ* for more information.

Mobile app cannot login to the AXIS Camera Station server

The following error messages are shown in the mobile app:

- Wrong certificate: The server certificate has changed and we don't know if you are communicating with.

- Your information is at risk. Do you want to connect to this server?

Check the following:

- User name and account working?

  - Better create a dedicated restricted Windows user account for mobile app usage and add it to AXIS Camera Station.

  - In this *How-to guideline*, it is described how to create a windows user.

  - *Video tutorial* on user permission in AXIS Camera Station.

Test the account with AXIS Camera Station client that connect to the same AXIS Camera Station server via the same network. Verify with client on another machine and not the one installed on the same as the AXIS Camera Station server.

- Network connection to the server is working?

- AXIS Camera Station server is running with no issues?

- If Axis Secure Remote Access is not used, is port forwarding done correctly? Refer to *this guide* for detailed instructions.

If none of the above helps escalate the issue to AXIS Support. See *Escalation process on page 11*.

AXIS Camera Station licenses

Go to the *FAQ* for more information.

Escalation process

Escalate to *Axis Online Helpdesk*. Include necessary information.

Must-have info

- A clear description on how to reproduce the issue or under what circumstances does the issue happen.

- The TIME and the concerned camera's name or IP address when the issue happens.

- AXIS Camera Station system report generated directly after the issue happens.

- Make sure the system report is generated from the client or server where the issue has been reproduced.

- Live View related: Enable the **Include screenshots** option of all monitors in the Generate System Report dialog.

- Only include the database files if needed, excluding will speed up uploading.

Additional information by request

Debug logs

Sometimes we must turn on debug level logging to collect more information. This is only done by request from Axis Product Specialists. Instructions can be found in this *FAQ*.

Network trace

If requested by the product specialist, the following information should be generated at the same time as when AXIS Camera Station system report is taken.

Issue isolated to a specific camera:

- It would be appreciated, if the camera's time is synchronized with the server's. This makes it easier for Axis Support to see the issue.

- Network traces taken over the time the issue happens if it's reproducible. This includes:

    - A 60 sec Network trace taken on the camera (only applicable to camera firmware 5.20 and above)

        Use the following VAPIX command: Change the login, IP address and duration (in seconds) if needed:

        ```
        http://root:pass@192.168.0.90/axis-cgi/debug/debug.tgz?cmd=pcapdump
        &duration=60
        ```

    - A 10-30 sec Network trace taken on the server showing communication between the server and the camera. *This document* contains detailed instructions which can be sent to customers directly.

Database files

In cases where we need to examine or manually repair the database. Select **Include database in the report** before system report is generated.

Screenshots

When it's a Live View issue, related to UI, i.e. timeline for recordings or difficult to describe.

Screen recordings

When it's difficult to describe the problem in words. i.e., when lots of UI interactions are involved to reproduce the issue.

Large files

Escalation process

Note

If the file is larger than 100 MB, e.g. network trace or database file, send the file via Axis webshare or https://axis.wetransfer.com.

Tips and tricks

Live View Debug Info

By pressing CTRL and I, debug information is displayed in Live View.

Server Configuration Sheet

The server configuration sheet contains a lot of information about the system, such as:

- System and server information
- Camera settings
- Camera recording settings
- Video and audio settings
- Camera metadata settings
- Action rules
- Schedules
- Recording storage
- Aux devices
- Licenses

YouTube channel for AXIS Camera Station

Technical support and feature videos are available on *youtube.com*

More frequently asked questions at axis.com

At axis.com we have lot of *information* gathered.

AXIS Camera Station Network Video Recorder

AXIS S11 and S22 frequently asked questions: *FAQ*.

AXIS Camera Station S11 Recorder Series and AXIS Camera Station S90 Desktop Terminal Series

Support guidelines

This *document* contains information about:

- Who to contact for support

- Service Level offering based per product

- Next Business Day support applicable

- On-site support dispatched

Recovery kit

Contact *Axis Online Helpdesk* for instructions on how to create a bootable Axis USB Recovery kit.

Camera

Is the camera's homepage working fine? If not, troubleshoot the camera.

Go to axis.com to learn more on how to *troubleshoot*.

How to generate a camera server report, see this *link* at axis.com

We recommend that you use the latest official camera *firmware*.

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Warranty and RMA

Follow these steps until your problem has been solved:

1. Search the *FAQ database*.

2. If your unit still does not work as expected, contact *Axis Online Helpdesk* to obtain assistance from an Axis technical support engineer.

3. If your unit still does not work as expected, return your defective unit marked with your authorized case number to your Axis approved RMA partner or to your local reseller - according to the instructions given in your support case.

4. Your Axis approved RMA partner will repair or replace your unit and return it to you. Or, your local reseller will send the defective unit to its distributor, who will send the unit on to Axis for a repaired or refurbished unit. You will receive a fully functional unit.

More information is found at *https://www.axis.com/global/en/support/warranty-and-rma*

Need more help?

Useful links

- *AXIS Camera Station help center*
- *AXIS Camera Station User Manual*

Contact support

Contact support at *axis.com/support*.