Araani FireCatcher maintenance manual

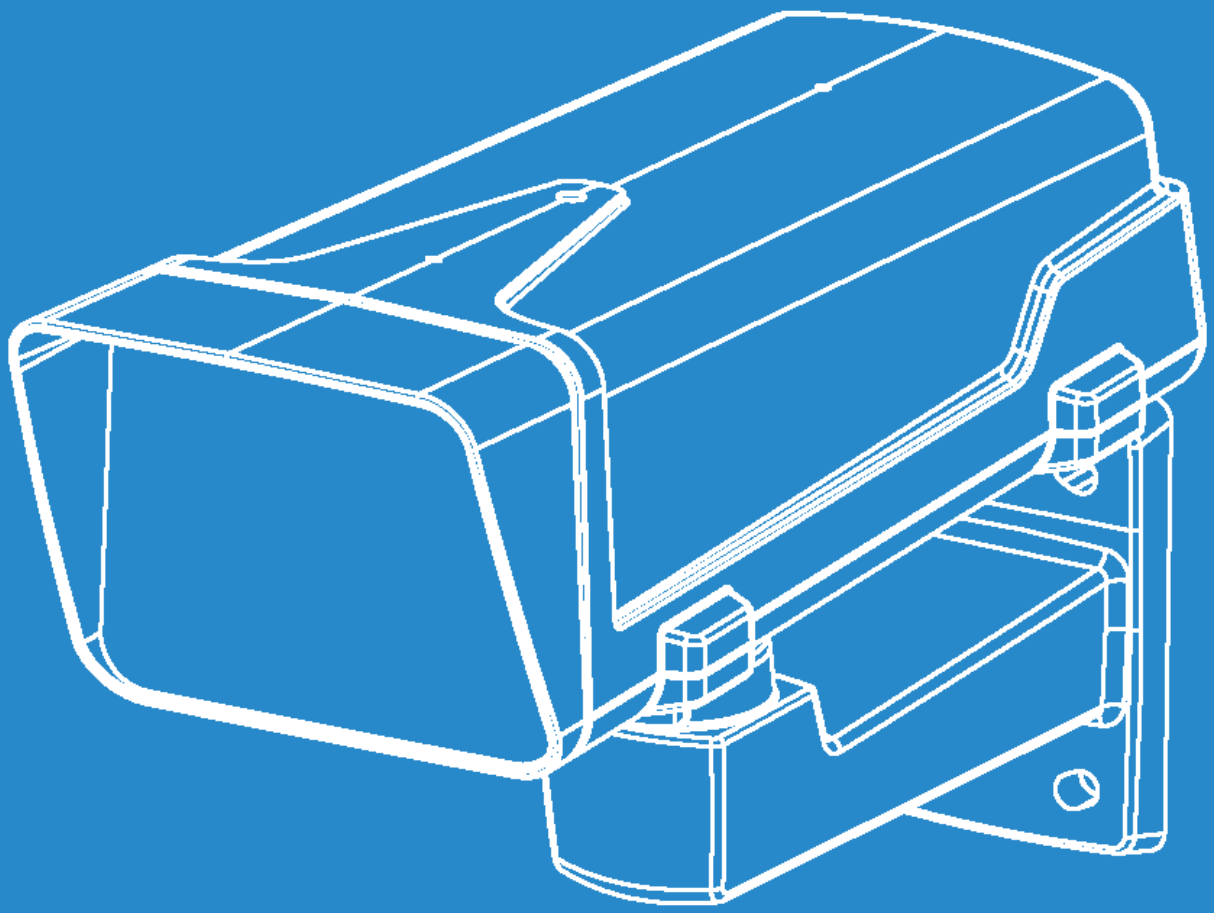


Table of Contents

Safety and regulatory information

Definition of symbols

Hazard statements

Danger:	Indicates a hazardous situation which, if not avoided, *will* result in serious injury or death.
Warning:	Indicates a hazardous situation which, if not avoided, *could* result in serious injury or death.
Caution:	Indicates a hazardous situation which, if not avoided, *might* result in moderate or minor injury.
Notice:	Indicates a situation which, if not avoided, might result in property damage or in an undesirable result or state.

Others

Information:	Indicates a shortcut or any other useful indication.
Attention:	Indicates an element which requires extra attention, not necessarily a hazard

Safety information

Warning:

Maintenance of cameras with Araani analytics should be performed by qualified personnel only.

Always inform local security officers and facility managers about maintenance activities and the impact on equipment availability and planned alarm triggering before proceeding with maintenance activities. Request permission where required.

Notice:

Avoid exposing the camera to shocks or heavy pressure.

Use only applicable tools when working with the camera. Excessive force could cause damage to the device.

Do not use chemicals, caustic agents, or aerosol cleaners. Use a clean cloth dampened with pure water for cleaning.

Use only accessories that comply with technical specification of the device. These can be provided by your supplier.

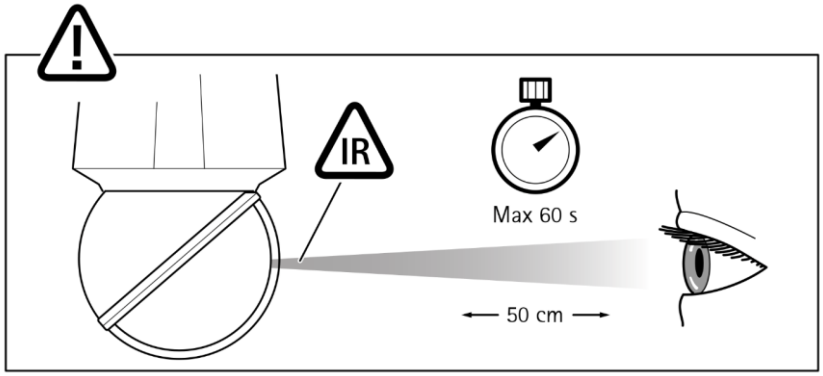
Use only spare parts provided by or recommended by Axis.

Do not attempt to repair the device by yourself. Contact your supplier or Araani for service matters.

Disclaimer

Warning: Maintenance of fire detection equipment may be subject to local regulations. These local regulations always overrule (in case of conflict) or append to the maintenance instructions in this manual.

Warning: If your camera has IR, don't look at the operating lamp.



Equipment modifications

All hardware must be installed and used in strict accordance with the instructions given in the user documentation. Unauthorized equipment changes or modifications will invalidate all applicable regulatory certifications and approvals.
Do not attempt to repair the product yourself. Contact your supplier for service matters.

Disposal and recycling

When a product has reached the end of its useful life, dispose of it according to local laws and regulations. For information about your nearest designated collection point, contact your local authority responsible for waste disposal. In accordance with local legislation, penalties may be applicable for incorrect disposal of this waste.

This symbol means that the product shall not be disposed of together with household or commercial waste. Directive 2012/19/EU on waste electrical and electronic equipment (WEEE) is applicable in the European Union member states. To prevent potential harm to human health and the environment, the product must be disposed of in an approved and environmentally safe recycling process. For information about your nearest designated collection point, contact your local authority responsible for waste disposal. Businesses should contact the product supplier for information about how to dispose of this product correctly.

Some products use lithium batteries as the power supply for its internal real-time clock (RTC). Lithium batteries contain 1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME), CAS no. 110-71-4.

Liability

Every care has been taken in the preparation of this document. Please inform Araani NV of any inaccuracies or omissions. Araani NV cannot be held responsible for damage caused by technical or typographical errors and reserves the right to make changes to the product and manuals without prior notice. Araani NV makes no warranty of any kind regarding the material contained within this document, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Araani NV shall not be liable nor responsible for incidental or consequential damages in connection with the furnishing, performance or use of this material. This product is only to be used for its intended purpose.

Copyright Notice

Trademark acknowledgements

AXIS COMMUNICATIONS and AXIS are registered trademarks or trademark applications of Axis AB in various jurisdictions. All other company names and products are trademarks or registered trademarks of their respective companies.
Ethernet, Torx, Microsoft, Milestone, Genetec and WWW are registered trademarks of the respective holders.

Contact and support

Should you require any technical assistance, please contact your Araani reseller. If your questions cannot be answered immediately, your reseller will forward your queries through the appropriate channels to ensure a rapid response.

If you are a reseller, please contact your direct contact person, or contact our support staff via support@araani.com.

Araani NV
Luipaardstraat 12
8500 Kortrijk (Belgium)
info@araani.com
https://www.araani.com
+32 (0)56 49 93 94

Introduction

About this manual

This manual describes the maintenance of FireCatcher detectors. Maintenance should be performed:

- On a recurring base, as agreed in the maintenance contract, e.g. yearly maintenance.
- After an incident has occurred (e.g. fire, smoke, pollution, physical damage, hardware repair).
- Depending on the environment, it may be recommended to perform cleaning more frequently e.g. four times per year in waste processing installations.

FireCatcher and FireCatcher Camera are video analytics products that can detect flames or signs of smoke in the camera field of view and can be connected to Fire Alarm Control Panels.

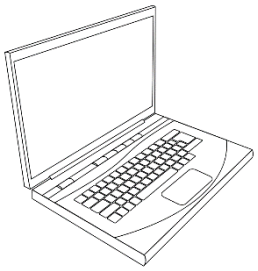
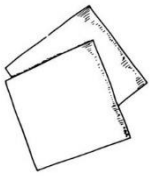
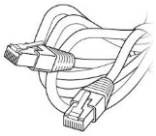
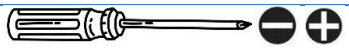
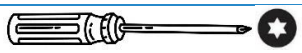
Please read this document carefully before proceeding with maintenance activities.

The manual expects the reader to have some basic knowledge about electrical wiring, the use of CCTV cameras and the operation of Araani analytics.

Please refer to the related product user- and/or Installation manuals for any information that is related to the installation, configuration or usage of the Araani analytics products.

Required Tools

Following tools may be needed for Araani product maintenance.

Description	Image
Laptop with • Microsoft Windows operating system. • 100/1000 mbps Ethernet connection. • Browser software. (Preferably Google Chrome™ or Mozilla Firefox®) • Axis IP utility. Download latest version here: https://www.axis.com/support/tools/install-and-manage-systems/axis-ip-utility. • Axis device manager. Download latest version here: https://www.axis.com/support/tools/install-and-manage-systems/axis-device-manager. • Latest approved version of camera firmware. Axis firmware is available here: https://www.axis.com/support/firmware. Only use LTS (long-term support) versions that are approved in the release notes of your Araani software version. • Latest version of Araani analytics ACAP. Araani software updates are shared on the Araani partner SharePoint https://araani.sharepoint.com/sites/AraaniPartnerSite. Each software version comes with a release note that contains important compatibility and upgrade notes.	
Cleaning cloths. Preferably use microfiber clothes suited for lens cleaning.	
Ethernet cable, preferably shielded Cat 5E or better. Consider sufficient length for the cable in order to access cameras or LAN at difficult places, large height, etc. e.g. 15 meters.	
Lux meter	
Slotted & Philips screwdrivers	
Screwdrivers Torx T20 & T30	

.

Maintenance routines

Recurring maintenance routine

A recurring maintenance routine consists of following activities:

	Activity	Description
1	Cleaning the camera window	A thorough cleaning of the camera window, dome cover or lens of the camera to maintain a clear image.
2	Verify date and time	Verify date and time setting of the camera and adjust if needed.
3	Retrieve and inspect the camera server report	Retrieve and inspect the internal logging of the camera firmware for issues, e.g. CPU performance issues.
4	Retrieve and inspect Araani analytics log	Retrieve and inspect the internal logging of the Araani analytics for issues e.g. CPU performance issues.
5	Verify and adjust the view and area setup	Compare the field of view, view area, focus area, detection zones and privacy masks to previously documented position in the as-built documentation and re-adjust if necessary. For PTZ cameras, this step needs to be repeated for each preset position. Fine-tune the camera focus.
6	Upgrading camera firmware	If needed, the camera firmware can be updated to the latest approved and tested versions. ⚠ Notice: The camera firmware should only be upgraded to a version that is approved and tested with the Araani analytics.
7	Upgrading Araani software	Upgrade the analytics ACAP to the latest tested version. New application versions may include performance improvements, bug fixes, cybersecurity updates and additional functionality. Verify the image settings. ⚠ Notice: The camera firmware may need to be upgraded to support the new analytics version.
8	Functional testing	Test the connectivity and analytics functionality if appropriate.
9	Documenting and reporting	Document the maintenance activities and changes. This as-built documentation serves as the new baseline for subsequent maintenance actions. Provide this information to support@araani.com for future reference.

Cleaning routine

Harsh and heavy polluted environments may require a more frequent cleaning regime. As a cleaning activity may be affecting the position of the camera, a verification of the field of view is also required for such intervention. Follow steps below to perform a cleaning-only maintenance routine.

	Activity	Description
1	Cleaning the camera window	A thorough cleaning of the camera window, dome cover or lens of the camera to maintain a clear image.
2	Verify and adjust the view and area setup	Compare the field of view, view area, focus area, detection zones and privacy masks to previously documented position in the as-built documentation and re-adjust if necessary. For PTZ cameras, this step needs to be repeated for each preset position. Fine-tune the camera focus.
3	Documenting and reporting	Document the maintenance activities and changes. This serves as the new baseline for subsequent maintenance actions.

Repair

Whenever camera hardware breaks down or becomes damaged, a repair or replacement can be requested.

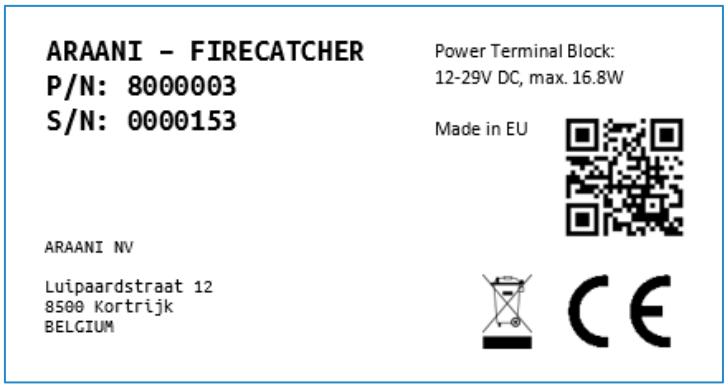
Before returning the camera, always request an RMA (Return Material Authorization) to support@araani.com, clearly describing the problem or damage.

Depending on the exact problem, hardware will be repaired or replaced. In both cases, a full reconfiguration and operational verification is required.

Maintenance tasks

Identifying the camera

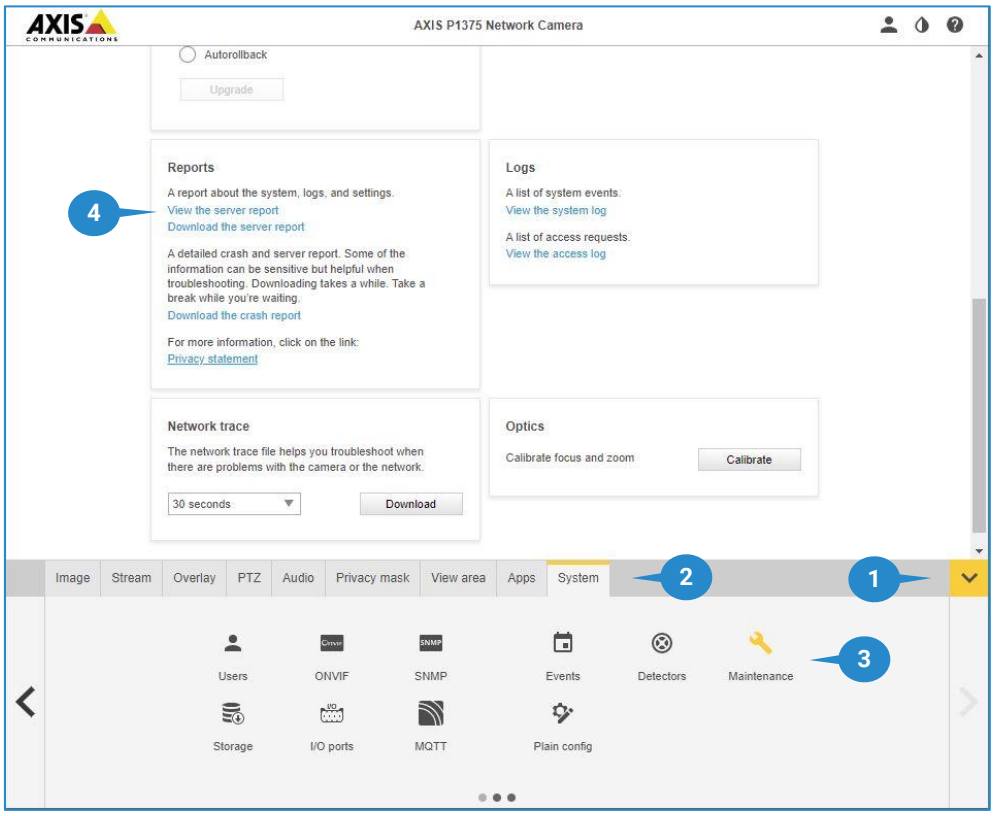
Each Araani product has a unique serial number that can be used for identification. This serial number consists of 7 digits and can be found on a label on the external housing of the camera after the “S/N:” indicator.



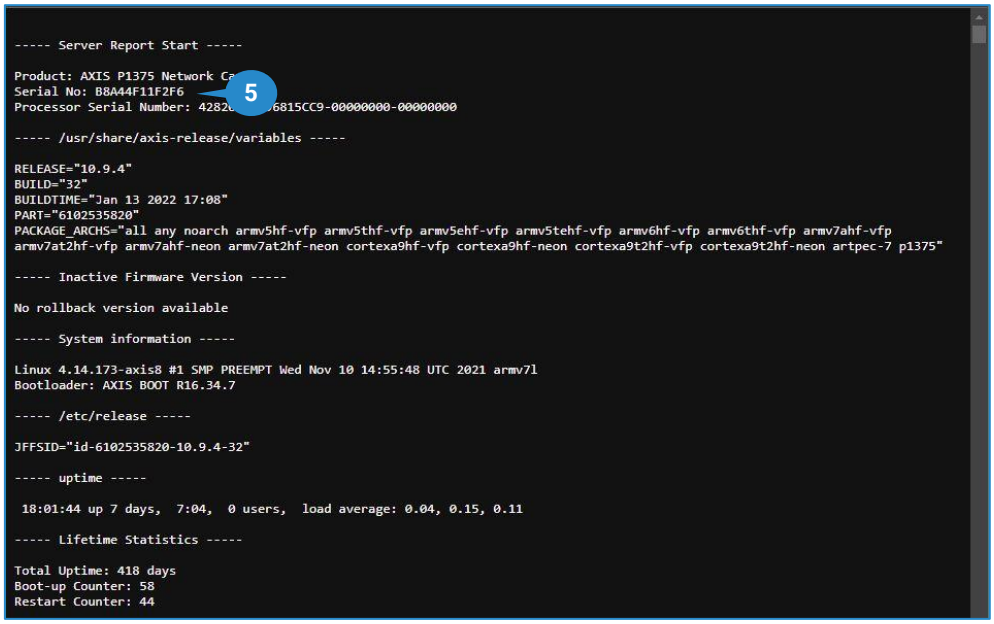
Besides the Araani serial number, the internal Axis camera itself also has also a unique serial number. Serial numbers for Axis network cameras generally start with 00408C or ACCC8E followed by 6 hexadecimal characters. The serial number is identical to the product's Ethernet port hardware address (MAC address) and can be written in the format 00408C1A2B3C or 00:40:8C:1A:2B:3C.

The Axis camera serial number label is mostly not clearly visible as it is mounted inside the housing, but it can be easily found in the camera web interface:

After accessing the camera web page, in the camera's internal web pages, go to: Setup (1) -> System (2) -> Maintenance (3) -> View the server report. (4)



A new tab will open with the camera server report. The serial number is stated in the first section (5).



Cleaning the camera window

Notice: Do not use chemicals, caustic agents, or aerosol cleaners.

Notice: Before cleaning the camera, stop the FireCatcher application on the camera or disable the alarm at the fire alarm control panel. Cleaning with the application running could cause a fault signal or alarm to be triggered.

To clean the camera housing window or the camera lens or the dome cover, preferably use a clean microfiber cloth dampened with pure water.

Do not wipe the camera window or lens with a common dry cloth: this may scratch the material, leaving a permanent mark that will affect the camera's footage.

Do not apply excessive force as this may increase the risk of damage and may cause a displacement that changes the field of view and the position of detection zones.

Warning: Do not forget to reactivate the application or re-enable the alarm at the fire alarm control panel after cleaning!

Information:: Axis offers microfiber lens cloths, specifically developed for cleaning lenses; see https://www.axis.com/products/axis-lens-cloth. Contact your supplier for more information.

Accessing the camera

The camera web interface can be accessed, using standard internet browser software on a standard laptop computer. This involves making a physical network connection to the camera, finding the IP address of the camera if unknown, configure the maintenance laptop IP address and finally accessing the interface through the browser.

First, a physical network connection needs to be established between the maintenance laptop and the camera. This can be done in two ways:

1. Connect to the camera directly to the maintenance laptop using a network cable.
   This method will need to be used if:
   a. The camera is not physically attached to a local network.

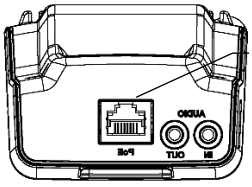
b. For IT security or any other reason, it is not allowed to connect physically to the local LAN with a maintenance laptop.

2. Connect to the camera via the local network.

Information: For conformity, Araani recommends using sequential IP addresses, starting from 10.0.8.101 for all fire detection cameras.

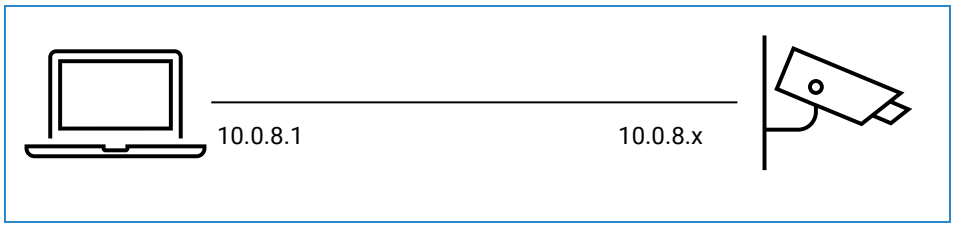
ESTABLISH A DIRECT CONNECTION WITH THE CAMERA

In many installations, a cable has already been foreseen, bringing the Ethernet interface out of the camera. In such case, simply connect that cable to the maintenance laptop. If not, the camera will need to be opened and an Ethernet cable attached to the internal Ethernet interface of the camera at one side and the Ethernet interface of the maintenance laptop at the other side. Below is an example of the Ethernet interface location on the back of the FireCatcher Camera inside the housing. The exact location may differ, depending on the camera model.



Now configure the IP address of the maintenance laptop to be in the same range as the camera.

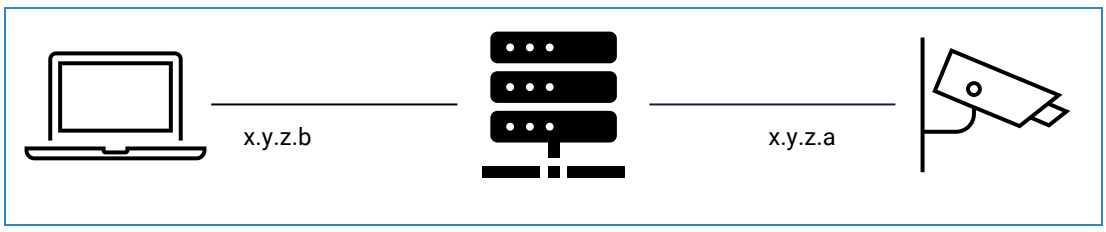
If the IP address of the camera is unknown, one can look for it using Axis IP utility (see Finding the camera with IPUtility) or Axis device manager (see Finding the camera with Axis Device Manager).



The IP address of the maintenance laptop should be set in the same range but different from the camera itself. Refer to Configuring the IP address of the maintenance laptop for changing the IP address of the maintenance laptop.

ESTABLISH A CONNECTION OVER LAN WITH THE CAMERA

If the camera is connected to the local network (LAN), one can connect to it by connecting the maintenance laptop to a free network connection point in the proximity of the camera.



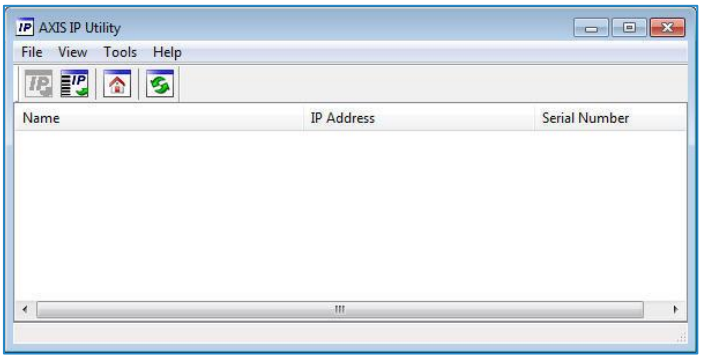
Consult with the IT manager before connecting to the local LAN. If permission is granted, the IP address of the maintenance laptop should be configured compliant to the local addressing scheme. If dynamic addressing is used (DHCP), make sure the maintenance laptop is set to DHCP. If a fixed addressing scheme is used, obtain a free address from the IT manager and configure it as such in the maintenance laptop. Refer to Configuring the IP address of the maintenance laptop for changing the IP address of the maintenance laptop.

FINDING THE CAMERA WITH IPUTILITY

If the IP address of the camera device is unknown, it can be found by using Axis IP utility or Axis Device Manager. Both applications are free and can be downloaded from https://axis.com/support.

To find the camera, using the Axis IP utility, follow these steps:

1. Start the IP utility IPUtility.exe.
2. Axis devices on the network are automatically discovered and displayed with their type and serial number in the application window.



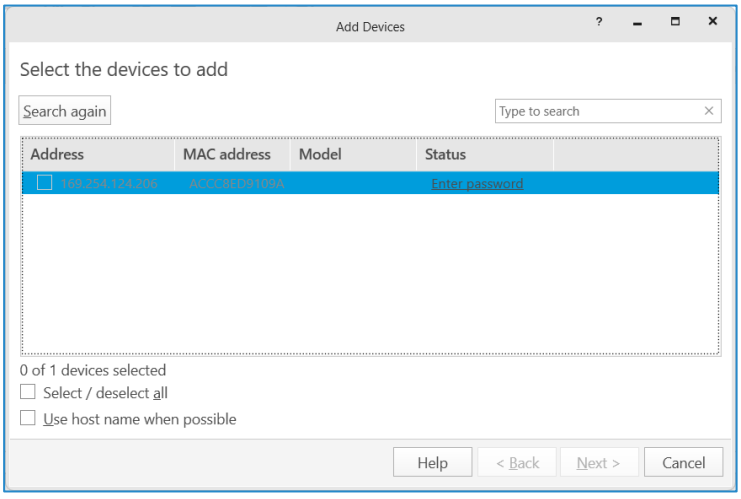
Notice: The Axis device and the client computer must be on the same subnet/network segment for discovery by Axis IP utility.

FINDING THE CAMERA WITH AXIS DEVICE MANAGER

If the IP address of the camera device is unknown, it can be found by using Axis IP utility or Axis Device Manager. Both applications are free and can be downloaded from https://axis.com/support.

To find the FireCatcher Camera with Axis Device Manager

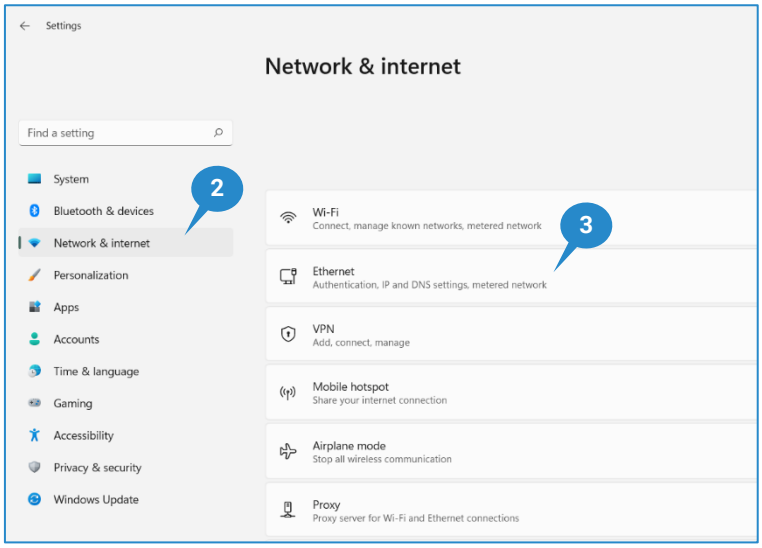
1. Download the latest version of the Axis device manager from https://www.axis.com/support/tools/install-and-manage-systems/axis-device-manager. Run the installation program and follow the instructions on screen.
2. Make sure your FireCatcher camera is powered up and connected to the network. Start Axis Device Manager on a Microsoft Windows computer that is on the same physical network as the cameras. The program will start and scan the network for cameras. All FireCatcher Cameras should appear in the "Add devices" dialog window in grey font with "Enter password" next to it. If your camera is not showing, verify network connections and power.



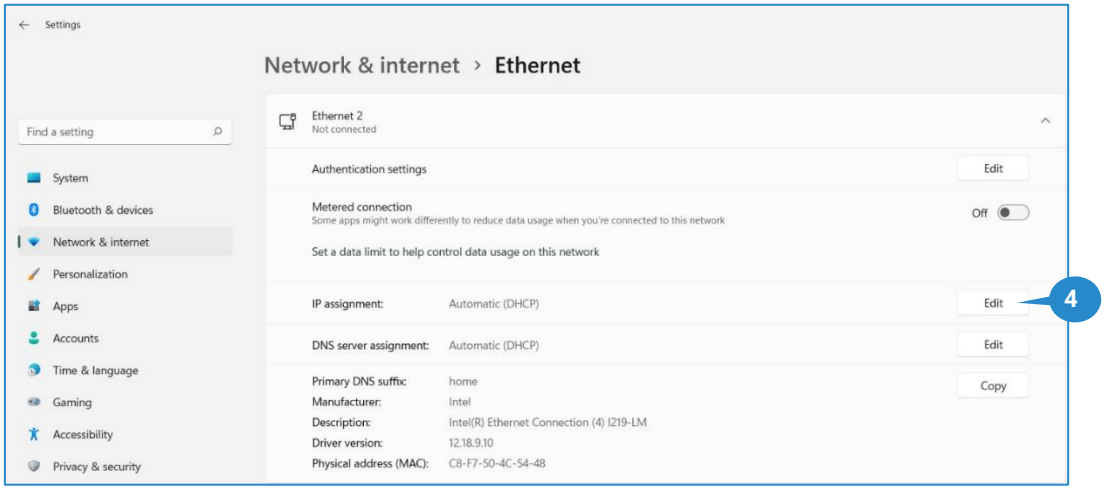
CONFIGURING THE IP ADDRESS OF THE MAINTENANCE LAPTOP

To change the IP address on a Windows 10 or 11 system, follow these steps:

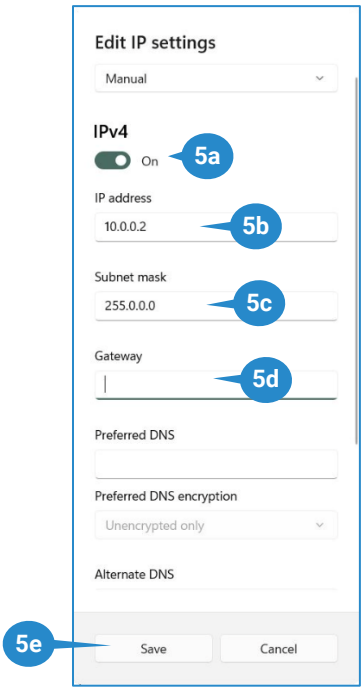
1. Select Start, then type "settings".
2. Select Settings -> "Network & internet".
3. Select "Ethernet".



4. For connecting to a LAN with DHCP addressing, make sure IP assignment is set to "Automatic (DHCP)"; close all windows.
   To connect directly to an Axis camera or to connect to a LAN with fixed IP addressing scheme, select "Edit" next to "IP assignment" and proceed to step 5.



5. Set:
   a. IPv4 to ON
   b. IP address to an unused address in the same subnet as your camera or the address that is assigned to you by the IT administrator.
   c. Subnet mask to the appropriate value. In most cases:
      networks starting with first number 0 - 127 have a subnet mask of 255.0.0.0
      networks starting with first number 128 - 191 have a subnet mask of 255.255.0.0
      networks starting with first number 192 - 223 have a subnet mask of 255.255.255.0
   d. If the camera is on a different subnet as yours, it may require filling in a default gateway IP address. Refer to the IT administrator for the correct address. In all other cases, leave this field blank.
   e. Select "Save"

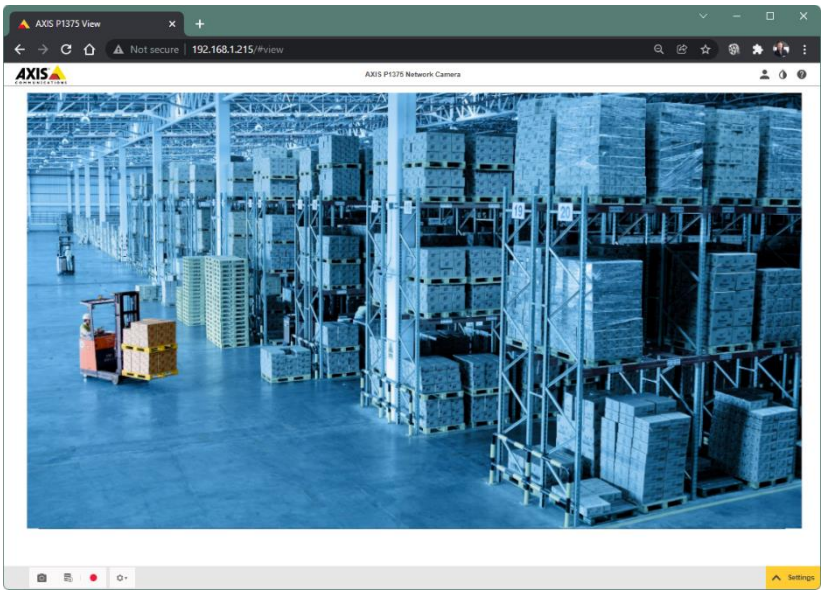


ACCESSING THE CAMERA WEB INTERFACE

The Axis camera web interface is tested and optimized for Chrome™ and Firefox® browsers. It is platform independent but if you use other browsers, you could experience limitations in functionality and support.

To access the camera interface, follow steps below.

1. Open a browser and enter the IP address or host name of the Axis device.
2. Enter the username and password. For maintenance purposes, you need the credentials with administrative rights.
   Default credentials are:
   username = root
   password = root
   If the password has been changed, it can typically be found in the as-built documentation by the installer or supplier.
3. The live view page opens in your browser.

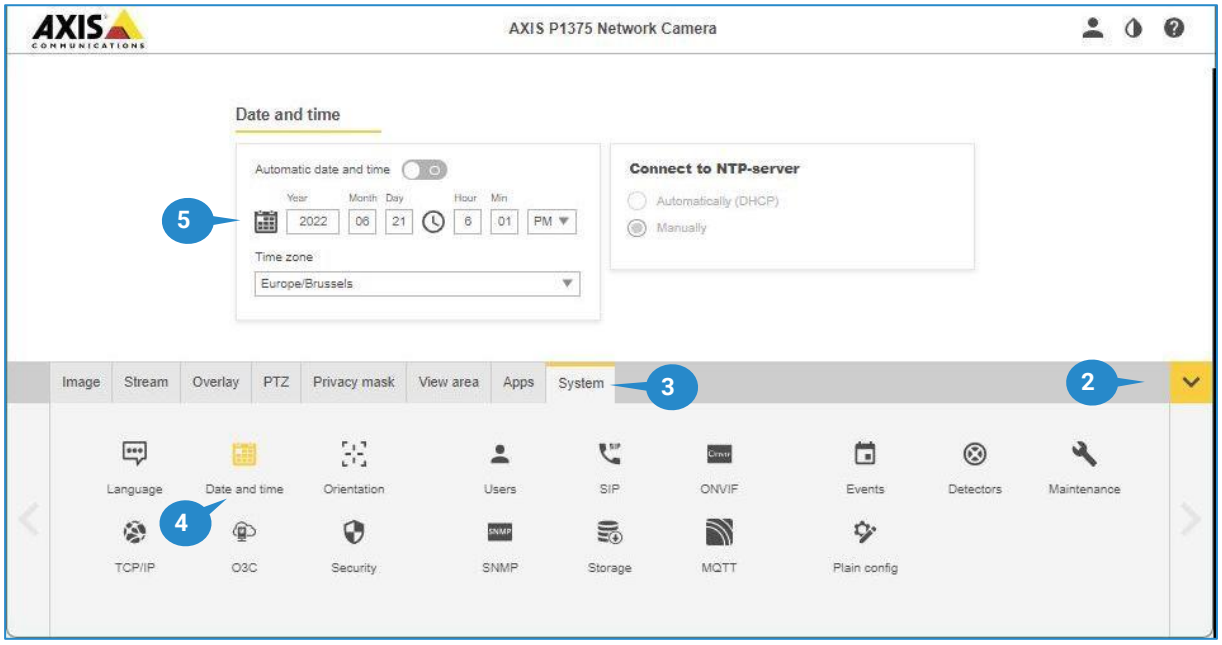


Verify date and time

Date and time setting of cameras that are not connected to a network time server (NTP) may drift over time. It is important to correct date and time for proper logging and optional communication of events and video to Video Management Systems.

To download the server report, follow these steps:

1. Connect to your camera, using your internet browser software and login to the camera webpage.
2. Open the settings window by clicking the “settings” button in the bottom right of the camera webpage.
3. Click the "System" tab.
4. Click "Date and time".
5. Adjust time and date in the “Date and time” window if needed.



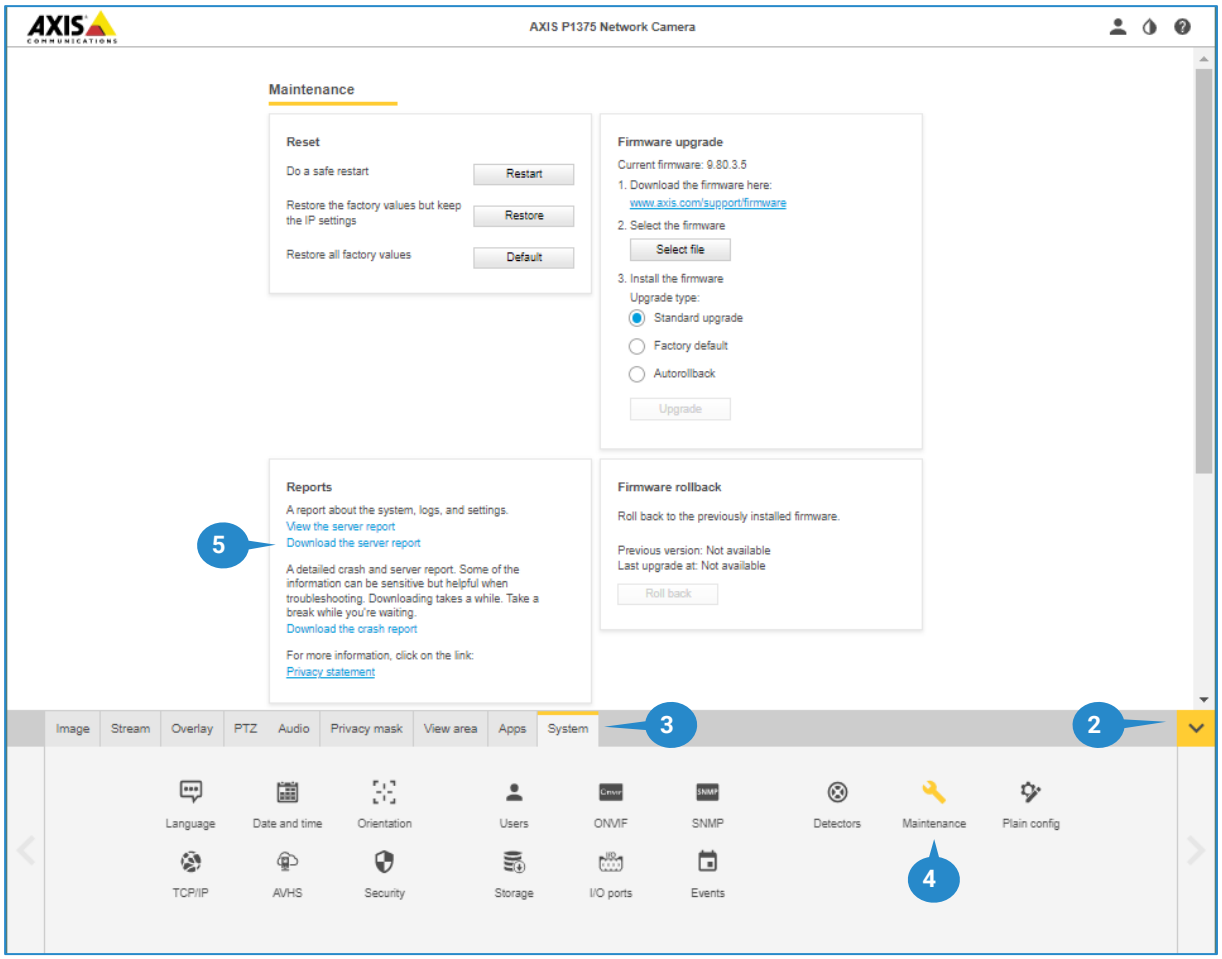
Retrieve and inspect the camera server report

The camera server report includes information such as system information, user access, event log, setting list, network configuration as well as a snapshot of the current picture. It provides a complete overview of the current camera configuration and status that can be referenced later and valuable information that can be used to determine causes of failure if any occur. The setting list can contain user IDs but does not contain passwords.

RETRIEVING THE CAMERA SERVER REPORT

To download the server report, follow these steps:

1. Connect to your camera, using your internet browser software and login to the camera webpage.
2. Open the settings window by clicking the “settings” button in the bottom right of the camera webpage.
3. Click the "System" tab.
4. Click "Maintenance"
5. Click "Download the server report"



A zip file is automatically created, named "Axis_SR_<date>_<time>_<MAC>.zip where:

<date> = date of report creation, formatted yyyymmdd

<time> = time of report creation, formatted hhmmss

<MAC> = MAC address of the Ethernet interface = serial number of the camera

and saved in the "Downloads" location on your PC. The zip file contains two files:

- A text file, named serverreport_cgi.txt with all information about the camera configuration and status.
- A JPG snapshot picture of the current image.

INSPECTING THE CAMERA SERVER REPORT

The server report text file is a standard text file and can be opened with any text viewer application (Microsoft Notepad, Notepad++, Windows Word, etc.).

To inspect the analytics logging for potential problems, perform following checks:

- Verify the average CPU load.

To verify the average CPU load, find the "load average" entry in the server report. The numbers following this label should be lower than 4.

Information: Store the zip file for later reference, together with the maintenance report.

Retrieve and inspect Araani analytics log

Araani analytics is maintaining a log of all detection events, messages, performance measurements, errors, etc. An inspection of this log can reveal potential issues that may affect detection.

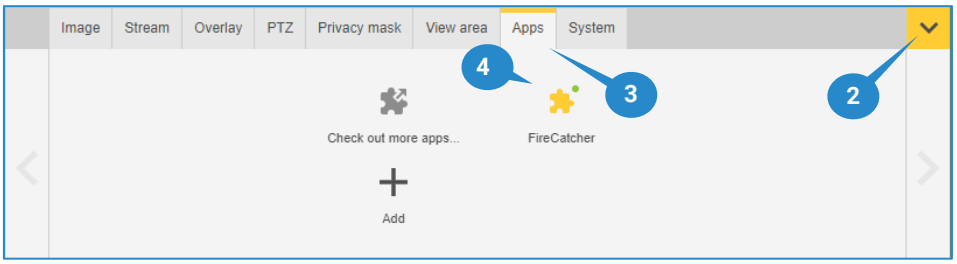
The log file can be retrieved in different ways:

- View / download through the web interface.
- Retrieve using a cgi command.

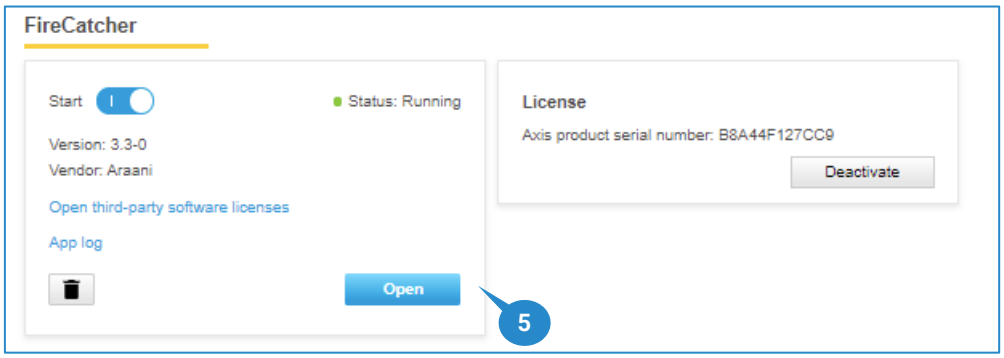
RETRIEVING THE ANALYTICS LOG THROUGH THE WEB INTERFACE

Follow steps below to retrieve Araani analytics diagnostics information.

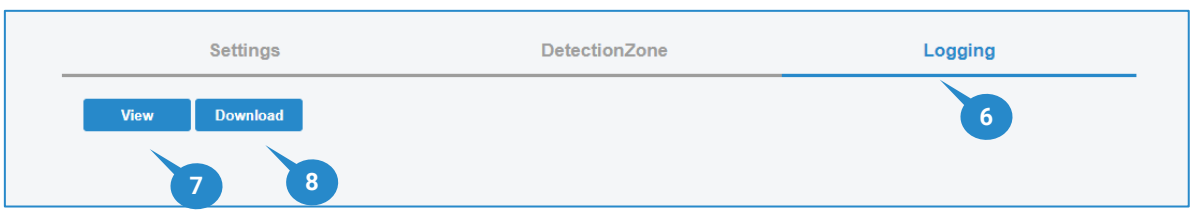
1. Connect to your camera, using your internet browser software and login to the camera webpage.
2. Open the settings window by clicking the “settings” button in the bottom right of the camera webpage.
3. Click the “Apps” tab.
4. Click on the app icon for which you want to retrieve the logging.



5. Click “Open” to access the analytics configuration page.



6. A new browser window will appear that contains all available settings to configure the app.
   Click the “Logging” tab to access the diagnostics page.
7. To view the logging information of the application, click “View”.
8. To download the logging information of the application, click “Download”.
   A text file will be created, named ‘<ip_address>.log’ (where <ip_addresss> is the ip address of your camera) and saved in the "Downloads" location on your PC.



RETRIEVING THE ANALYTICS LOG WITH A CGI COMMAND

To retrieve the analytics logging, using a cgi command, type following link in your web browser:

"https://<ip_address>/local/FireCatcher/logging.cgiError! Hyperlink reference not valid. [?filter=active,all]"

where:

<ip_address> = ip address of the camera

filter=active (optional): will only retrieve active events.

filter= all (optional): will retrieve all events. This is the default mode.

This request will return a "404 not found" error page but the log file will be downloaded to the "Downloads" location on your PC.

INSPECTING THE ANALYTICS LOG

The analytics log file is a standard text file and can be opened with any text viewer application (Microsoft Notepad, Notepad++, Windows Word, etc.).

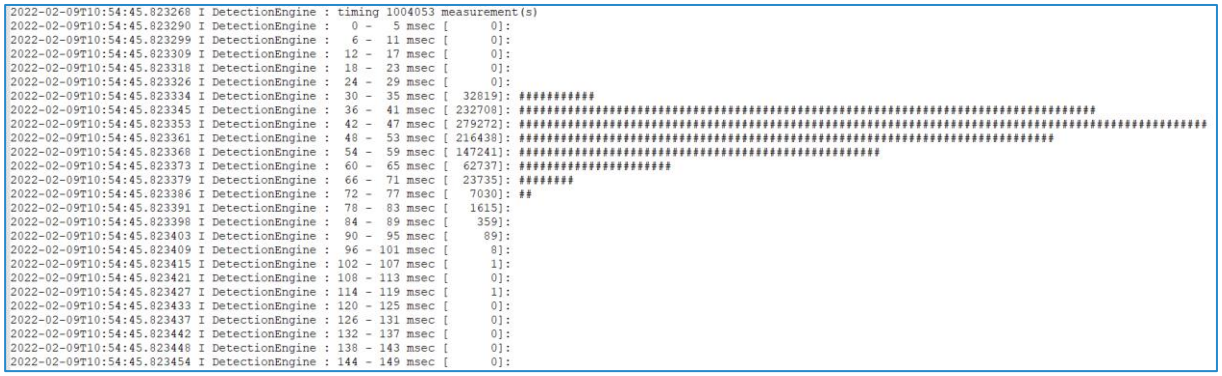
The file contains all log messages, each on a separate line, in chronological order, oldest first.

To inspect the analytics logging for potential problems, perform following checks:

- Verify the calculation timing histogram.

Verifying the calculation timing histogram

With logging level default set to "Info", the analytics application creates a histogram of image frame processing times in milliseconds every 24 hours, starting with the first 24 hours after start-up. This histogram is presented as a kind of bar graph like below, where the length of the graph is representative for the number of times that the application took x milliseconds to do the analysis of a video frame.



As the application should process 12 frames per second, all processing times should be below 84 milliseconds.

Verify the last few histograms to make sure that there are no excessive overruns in the histogram.

When the histogram shows frequent overruns (processing time larger than 84 ms), this indicates an overload of the CPU and may result in non-detections. Check the camera setup for sources of overload:

- Other ACAP analytics application installed and running simultaneously.
- SD-card recording.
- Too many video streams in use.

Information: Store the log file for later reference, together with the as-built documentation.

Verify and adjust the view and area setup

Over time, the position of the camera may change due to mechanical wear, vibration, accidental shock, changes in environment, etc. This has an impact on the view but also on some zones that are typically being setup at the initial installation time, possibly affecting the detection performance and general operation.

We distinguish following areas that need to be verified and adjusted if needed:

- Field of view: this area represents the total view area of the camera optics.
- View areas: view areas can be defined that are smaller than the total field of view and are generated by digitally zooming into that area. These areas can then be streamed separately or used for digital PTZ operation. View areas also affect the image that is processed by the analytics.
- Focus area: for proper focusing, a zone can be assigned for which the focus is measured and set. By default, this is the centre of the field of view but in some cases, it can be beneficial to designate a different focus area to obtain optimal focus.
- Privacy masks: to comply with GDPR legislation, it may be required to cover certain areas in the field of view before viewing or recording. A shift of the field of view will result in a different relative position of the privacy masks which may indirectly lead to a GDPR infringement.
- Detection areas: in some cases, fire detection is restricted to a number of defined zones. Any change in the field of view will result in a shift of these areas as well and affect detection.

To see what is processed by the analytics, one can either verify the detection zone setup or request an image through cgi command “http://<ip-address>/local/FireCatcher/capture.cgi”Error! Hyperlink reference not valid.

Besides the verification of these areas, it is also recommended to fine-tune the focus of the camera as this may drift over time. This will be part of the focus area verification procedure.

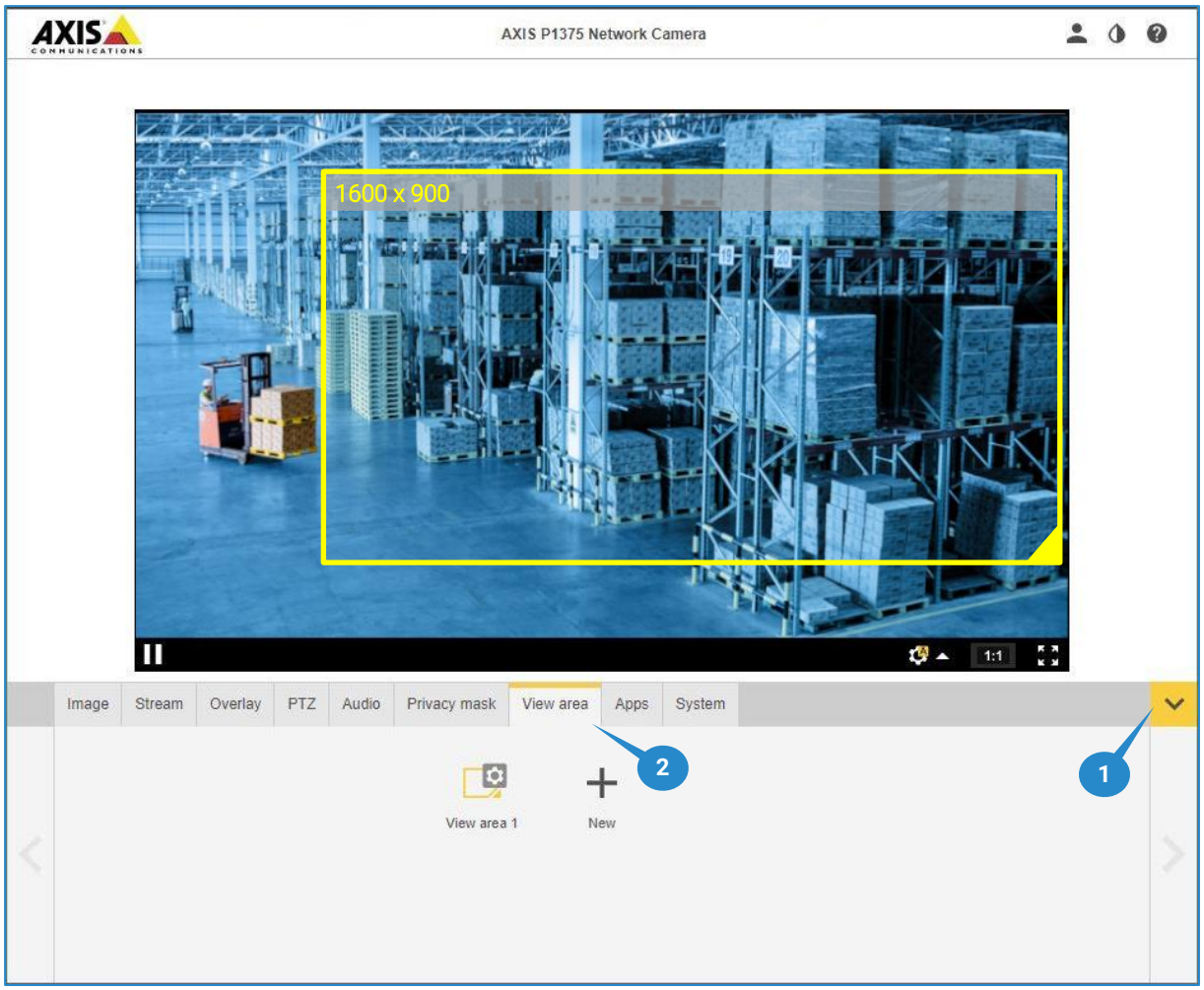
To verify the camera image and areas setup, log into the camera web interface. See Accessing the camera web interface on how to access the web interface. You can either use an administrator account login or a viewer account login to see the stream, but settings can only be changed with an administrator account.

To verify the field of view and view area setup, follow these steps:

1. In the camera web interface window, open the settings by clicking the “settings” button in the bottom right of the camera webpage.
2. Click the “View area” tab in the control panel.

View areas are drawn on top of the complete field of view as yellow rectangles with resolution information. Compare the field of view with the documented field of view in the as-built documentation and reposition the camera if needed. If the view areas are still not the same after repositioning, the zoom may have drifted and need adjustment too. The latter requires to open the camera and manually adjust the zoom ring. Refer to the installation manual on how to adjust position and zoom.

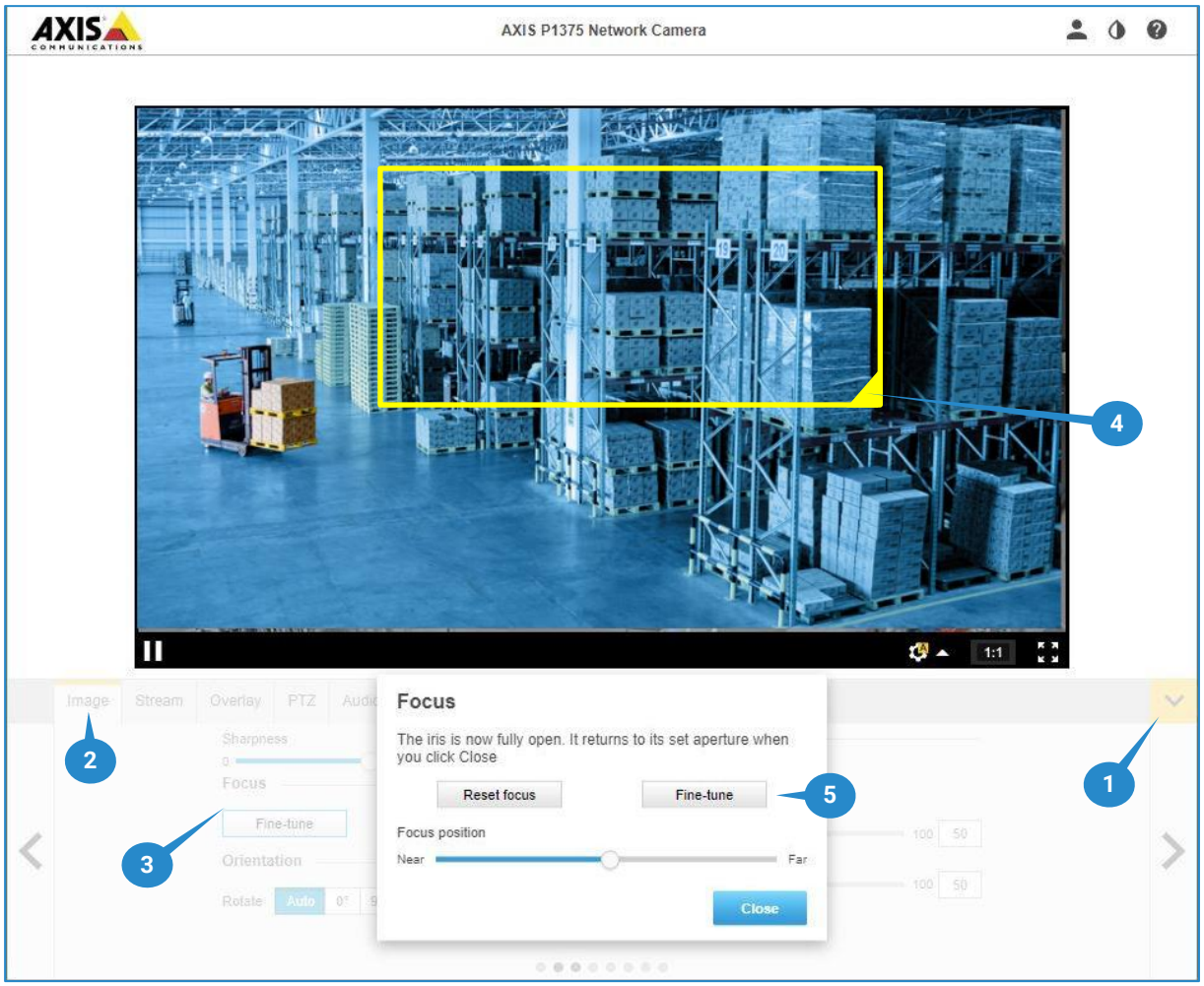
After any re-adjustment, generate a new screenshot of the view area setup to update the as-built documentation. A screenshot in Microsoft windows can easily be taken by pressing Windows key + Shift + S, select the "window snip" icon on top of the display and click on the window you want to capture, in this case: the browser window. A screenshot will be generated in the clipboard of Windows that can be pasted (by pressing CTRL + V keys) in the as-built documentation.



To verify the **focus area** setup and **readjust focus**, follow these steps:

1. In the camera web interface window, open the settings by clicking the “settings” button in the bottom right of the camera webpage.
2. Click the “Image” tab in the control panel.
3. Under “Focus”, click “Fine-tune”.
4. The focus area is indicated as a yellow rectangle on the image. Compare this area with the as-built documentation and re-adjust if needed.
5. Click “Fine-tune” to optimize the focus again.

After any re-adjustment, generate a new screenshot of the focus area setup to update the as-built documentation.

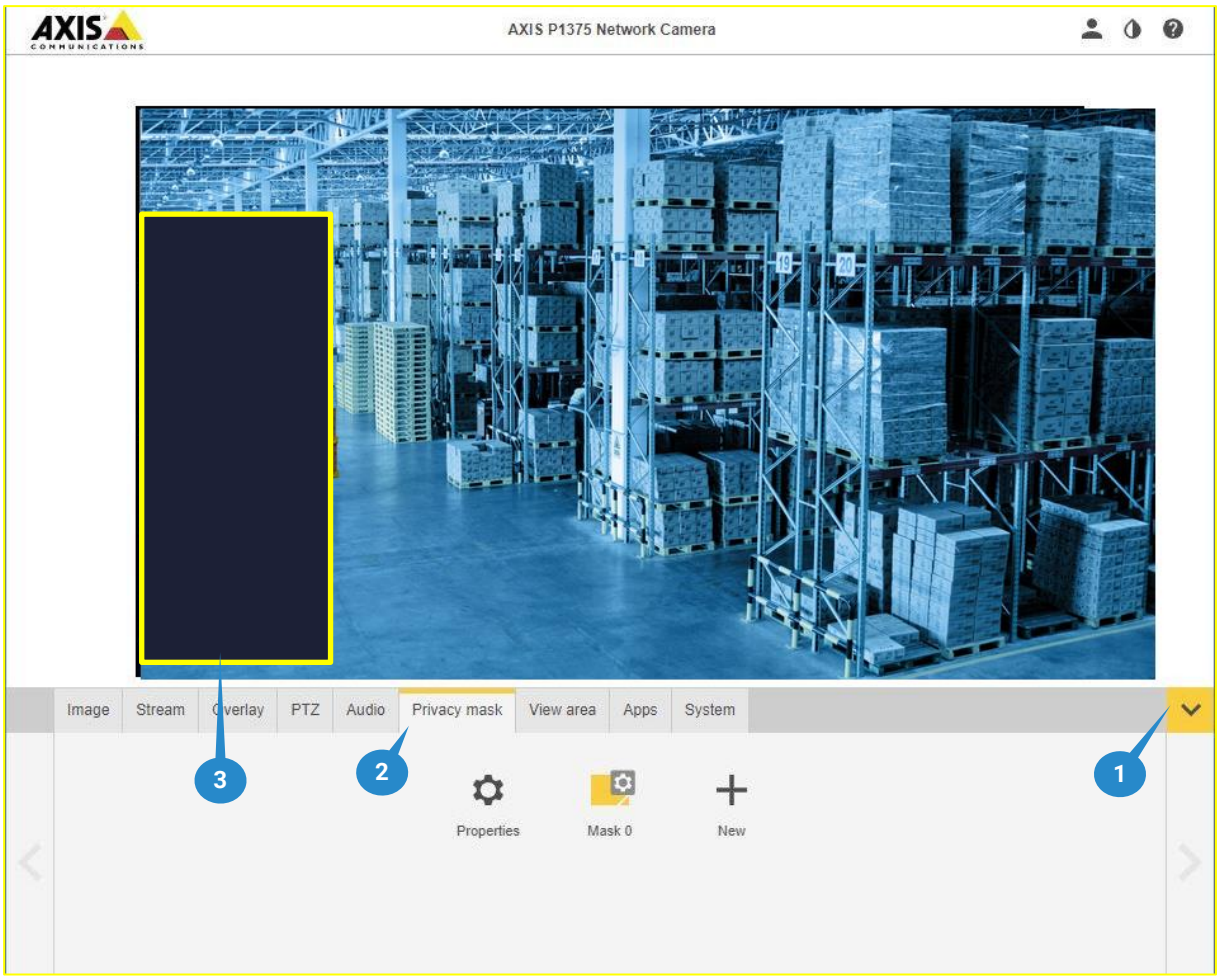


login to see the stream, but settings can only be changed with an administrator account.

To verify the privacy masks setup, follow these steps:

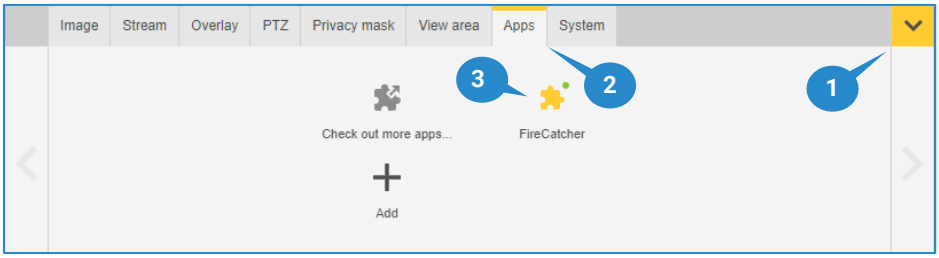
1. In the camera web interface window, open the settings by clicking the “settings” button in the bottom right of the camera webpage.
2. Click the “Privacy masks” tab in the control panel.
3. Privacy masks are indicated as blackened rectangles on the image. Compare these areas with the as-built documentation and re-adjust if needed.

After any re-adjustment, generate a new screenshot of the focus area setup to update the as-built documentation.

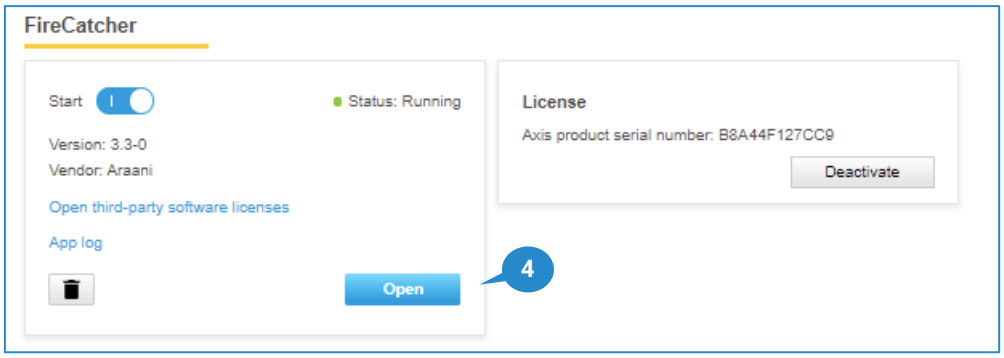


To verify the **detection zones** setup, one should look into the analytics application and compare the detection zone setup. To access the detection zone setup, follow these steps:

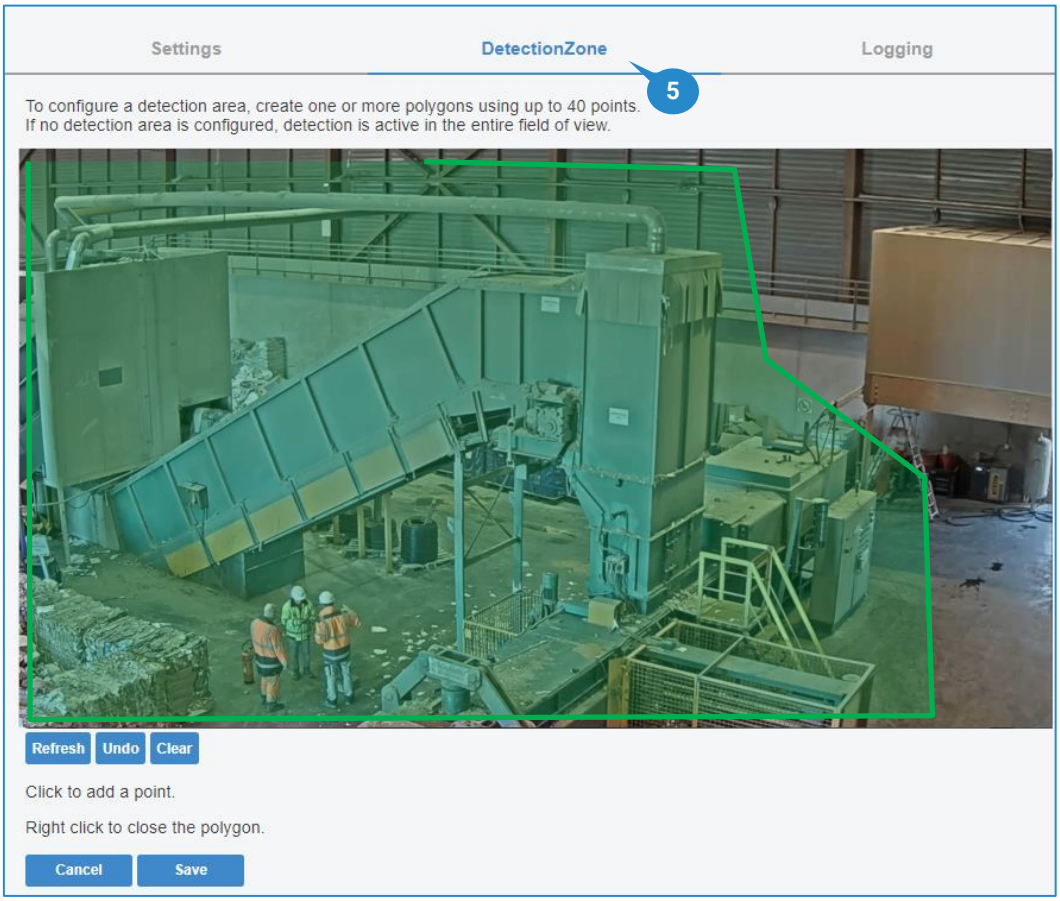
1. In the camera web interface window, open the settings by clicking the “settings” button in the bottom right of the camera webpage.
2. Click the “Apps” tab in the control panel.
3. Click the FireCatcher icon.



4. Make sure the application is running, otherwise start the app.
   Click “Open”.



6. A new browser window will appear that contains the basic settings to configure the app. Click the "DetectionZone" tab. An image will appear that shows the current camera field of view with detection zone(s) overlayed if any are configured.



Compare this view with what was reported in the as-built documentation or latest maintenance report. They should match EXACTLY.

If needed, correct the view by adjusting the camera fixture or by adjusting the zoom lens. In case of minor deviation, it may be sufficient to redo the detection zone setup in the detection zone interface above. Refer to the application user manual on how to create detection zones. Be aware though that you are not correcting the mispositioning of the privacy masks - if any - by using this alternative method.

After any re-adjustment, generate a new screenshot of the detection zone setup to update the as-built documentation.

Upgrading camera firmware

Axis releases new firmware for their cameras on a regular base. These updates contain fixes for bugs, improvements, cybersecurity updates and new features. Axis maintains two parallel tracks for firmware updates. The active track is released frequently and contains all recent improvements and new features. The long-term support (LTS) track is released much less frequently and strives to maintain stability and integration compatibility over time while adding stability and security improvements that have low risk of negatively affecting existing integrations. **Araani builds and tests its products only on the LTS releases.**

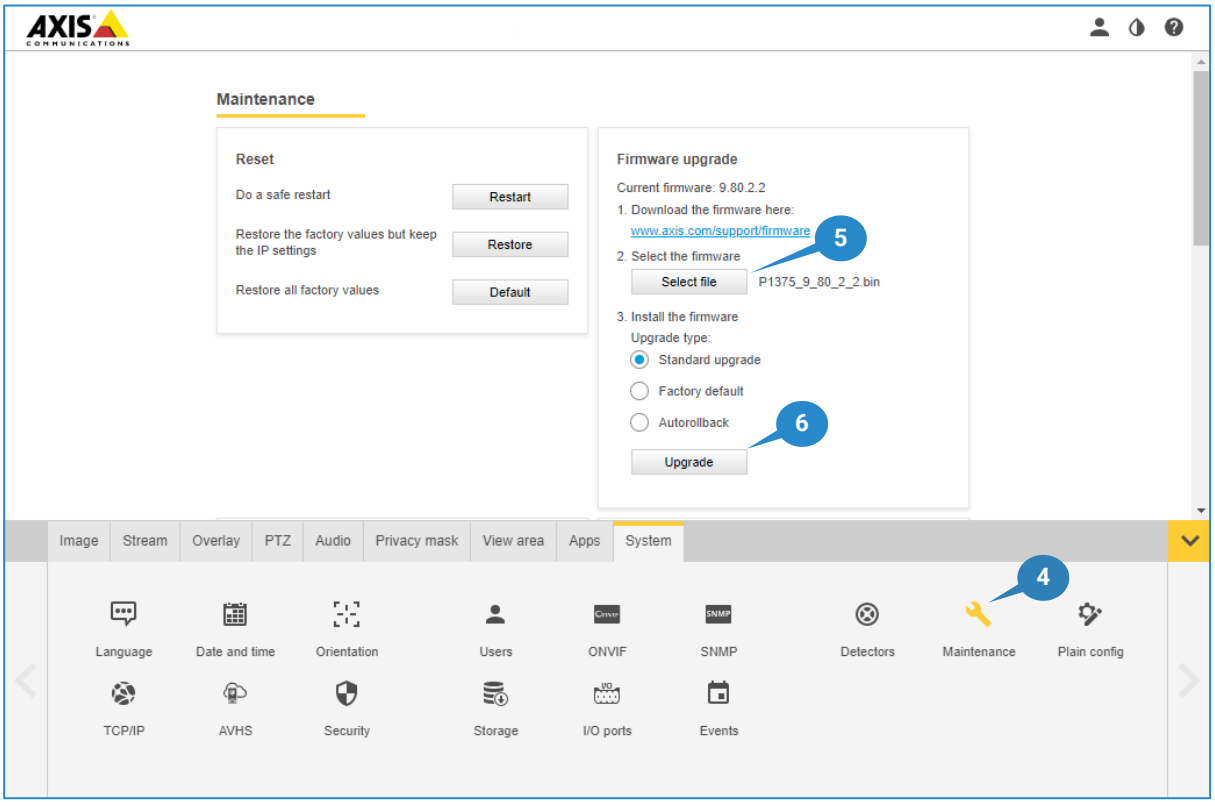
Always verify camera firmware compatibility in the latest release note of your Araani analytics app. This release note is found together with the latest application software on the partner sharepoint: https://araani.sharepoint.com/sites/AraaniPartnerSite.

Notice: Do not apply any Axis camera firmware upgrade that is not supported and tested by Araani. This could lead to failing analytics.

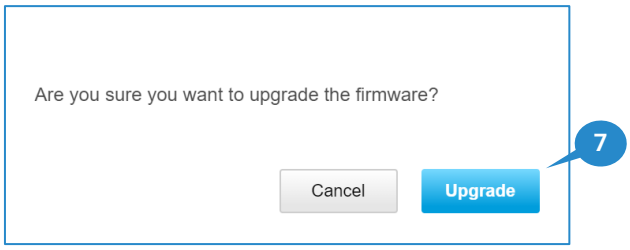
New Axis camera firmware versions can be downloaded from https://www.axis.com/support/firmware. Be sure to select the right camera model and only use Araani qualified LTS release for the analytics app(s) that you are running.

Follow these steps to upgrade the firmware version of your camera:

1. Connect to your camera, using your internet browser software and login to the camera webpage.
2. Open the settings window by clicking the “settings” button in the bottom right of the camera webpage.
3. Select the “System” tab in the control panel.
4. Select “Maintenance” in the control panel.
5. Select “Select file” and browse for the new downloaded firmware file.
6. Select “Upgrade”.



7. Confirm the upgrade by selecting “Upgrade”.



8. The camera will start uploading firmware, updating the system and finally reboot. This may take a few minutes.
9. Verify if the camera is properly upgraded by checking the version again in the maintenance menu.

Notice: In case the new qualified LTS firmware is a lower revision than the one that was installed, it is required to perform a factory restore (keeping IP-address/network information) after firmware downgrade to make sure that all settings are configured in a valid way. This means that the camera will need to be fully reconfigured as prescribed in the application user manual.

Upgrading Araani software

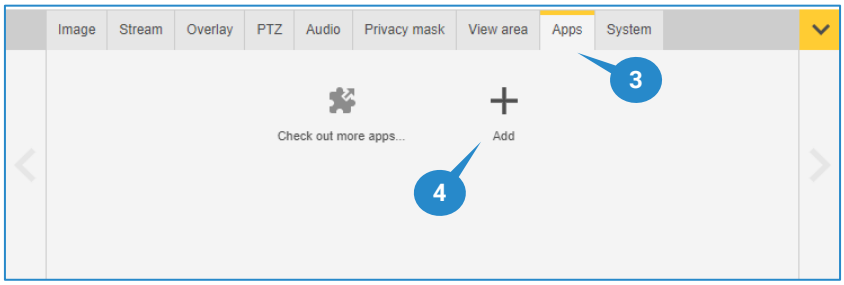
Araani releases updates of its analytics apps on a regular base. These updates contain fixes for bugs, improvements, cybersecurity updates and new features. It is recommended to use the latest ACAP version to guarantee optimal detection.

Notice: Certified products have been certified using a specific version of application. Changing the application version may void certification.

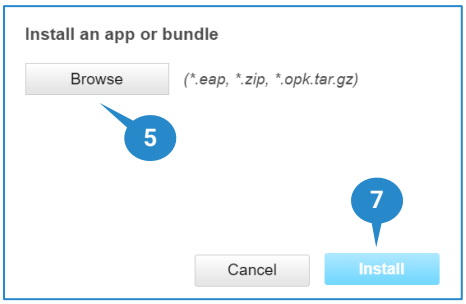
Notice: Before upgrading the Araani application, carefully read the associated release notes to verify any potential non-compliance with the specifics of the implementation on-site. The release notes may also state upgrade specifics with regards to correct heritance of the application settings.

To upgrade the Araani analytics application, follow these steps:

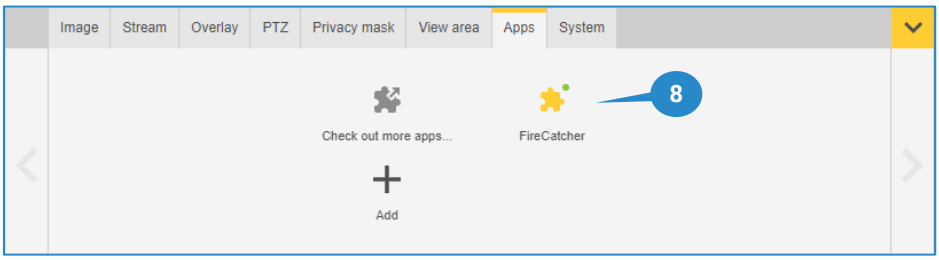
1. Connect to your camera, using your internet browser software and login to the camera webpage.
2. Open the settings window by clicking the “settings” button in the bottom right of the camera webpage.
3. Select the “Apps” tab in the control panel.
4. Select “Add”.



5. Select “Browse” to browse your local storage for the ACAP file.
6. Select the correct *.eap file for the application.
7. Select Install.



8. The application will overwrite the existing application. This may take a few minutes. After successful installation, the application should be visible in the “Apps”.



Araani applications are written with backwards compatibility in mind. Therefore, the upgrade should properly inherit the settings from the existing installation. Still, it is important to check this and verify proper operation after an upgrade.

Note that new versions of Araani software may involve other recommended settings for the camera image parameters. Therefore, it is also advised to check the image settings.

Functional testing

USING ARAANI FIRESIMULATOR

To test connectivity, alarm propagation and outputs of FireCatcher products, Araani provides a separate ACAP application, called FireSimulator. FireSimulator does not need a license to use.

FireSimulator allows to:

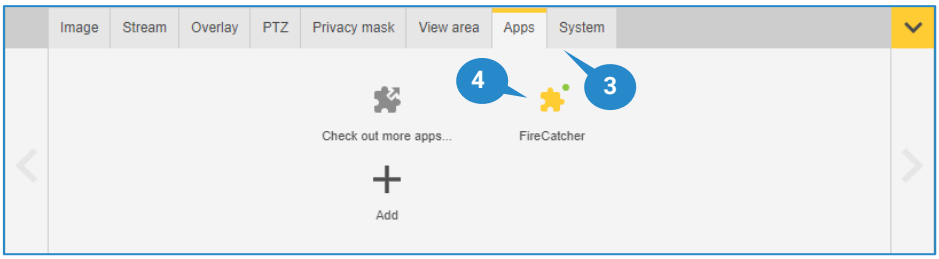
- Force the status of detection: operational, fault, smoke alarm or flame alarm.
- Assign a function to any of the four output signals of the I/O contacts.

The FireSimulator app is available as a separate ACAP package. On integrated products such as the FireCatcher Camera, the FireSimulator application comes pre-installed with the product. To install, upgrade or activate the FireSimulator license, refer to your product manual.

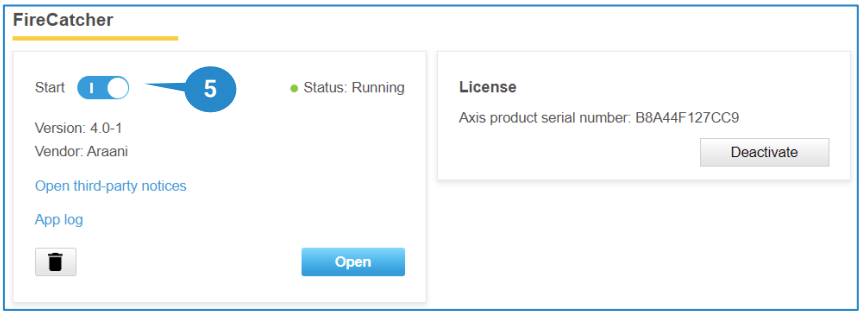
Before using the FireSimulator app, the FireCatcher app needs to be stopped. Do not use both applications simultaneous as this may result in unpredictable results.

To use the FireSimulator app, follow these steps:

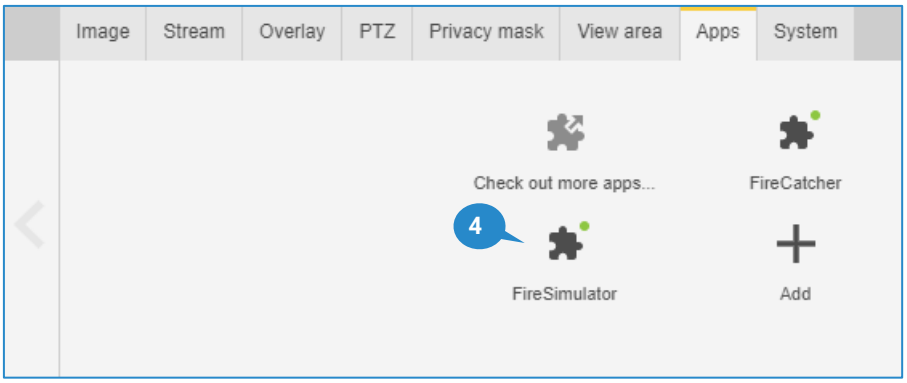
1. Connect to your camera, using your internet browser software and login to the camera webpage.
2. Open the settings window by clicking the “settings” button in the bottom right of the camera webpage.
3. Select the “Apps” tab in the control panel.
4. Select the FireCatcher app.



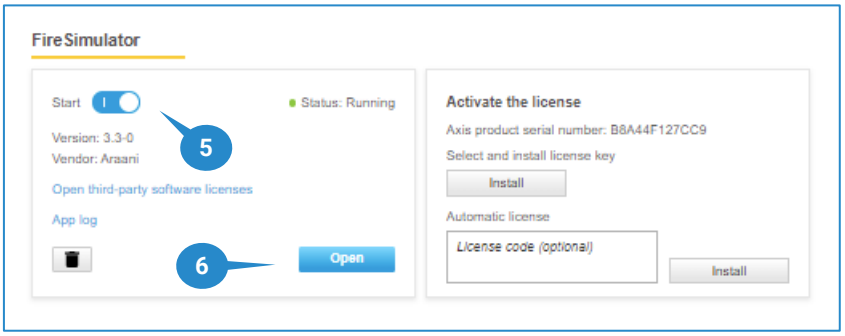
5. Stop the detection application by clicking the “Start” switch.
   Click “Open”.



6. Select the FireSimulator app.

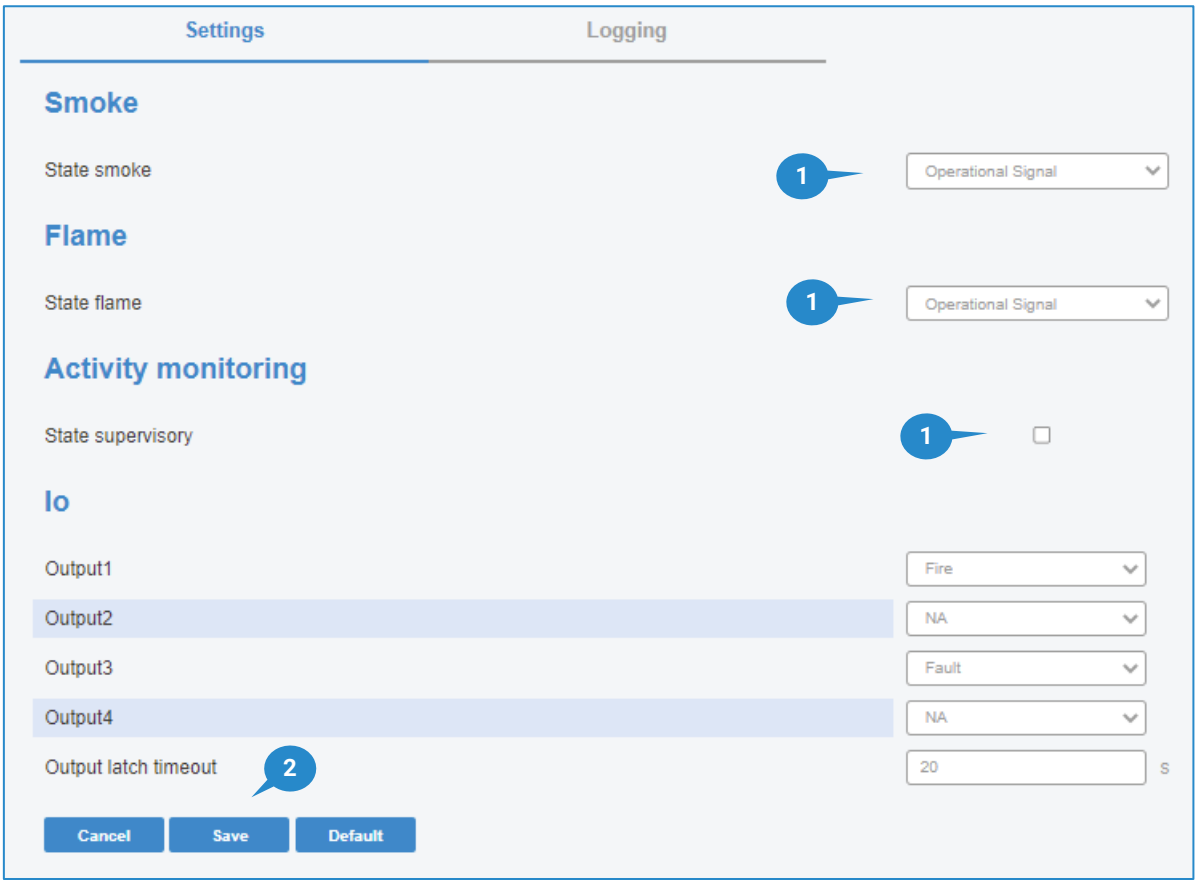


7. Click the start switch to start the FireSimulator application.
8. Click the “Open” button to access the FireSimulator controls. A new browser tab should appear with the application configuration controls.
   Note that FireSimulator does not need a license so you can ignore the texts on license activation in the dialog.



The FireSimulator configuration page allows to force the status of the detection algorithms as follows:

1. Select the desired state to be tested from either the smoke and/or flame algorithm and/or activate supervisory signal.
2. Click "Save" to apply the status.



The options and impact of the selected status are shown in this table:

Algorithm	State	Result
Smoke	Smoke alarm	All previous alarms are deactivated. Smoke alarm is generated. Fire alarm is generated. All outputs that are assigned smoke or fire are activated (= contacts opened).
Smoke	Fault signal	All previous alarms are deactivated. Fault alarm is generated. All outputs that are assigned fault are activated (= contacts opened).
Smoke	Operational signal	All previous alarms are deactivated.
Flame	Flame alarm	All previous alarms are deactivated. Flame alarm is generated. Fire alarm is generated. All outputs that are assigned flame or fire are activated (= contacts opened).
Flame	Operational signal	All previous alarms are deactivated.

Activity Monitoring	Supervisory Signal	Smoke detection is disabled. Flame and fire alarm can still be active. Supervisory signal output is activated.

Warning: Note that FireSimulator allows to configure the output settings. Make sure that all output settings are identical in the FireCatcher application as in the FireSimulator.

Notice: In some installation, a supervisory signal that is caused by activity in the field of view is propagated to neighbouring cameras as well. In such cases, not only the supervisory signal outputs should be tested but also correct propagation to the other cameras.

TESTING DETECTION WITH REAL FIRE AND SMOKE

Testing the equipment with simulated smoke or fire is in most cases not recommended or possible after a maintenance intervention.

If needed, follow the instructions in the user manual for testing the functionality and take all necessary safety measures.

Documenting and reporting

It is important to document all maintenance activities and report the new situation, including up-to-date screenshots of the field of view with view areas, the focus area setup, the view areas setup and the detection zones setup.

Always send this as-built information to support@araani.com for future reference and to facilitate fast response to any support issues that may arise.

An as-built template can be found in the FireCatcher user manual.

To support maintenance activities, a sample checklist is included below.

Attention: Some countries have local regulations in place that determine the level of documentation. Always check local regulations for additional documentation requirements.

Araani maintenance checklist

Information

Date of maintenance:	
Technician name:	
Technician email:	
Customer:	
Location / site:	
Camera model:	
Araani serial number:	
Camera serial / MAC:	
Referenced as-built documentation:	
New as-built documentation:	

Checklist

Description	*Action*	*Comments*
Hardware		
Clean window	☐ Done ☐ Not done ☐ Not applicable	
Field of view	☐ Compared to as-built ☐ Updated	
View areas	☐ Compared to as-built ☐ Updated	
Focus area	☐ Compared to as-built ☐ Updated	
Privacy masks	☐ Compared to as-built ☐ Updated	
Detection zones	☐ Compared to as-built ☐ Updated	
Image parameters	☐ Verified	
Firmware		
Camera firmware	☐ Updated ☐ Not updated	Old version: Current version:
Analytics firmware	☐ Updated ☐ Not updated	Old version: Current version:

Functional testing		
Simulator test	☐ Smoke ☐ Flame ☐ Fault ☐ Supervisory	
Smoke detection test	☐ Passed ☐ Not passed ☐ Not done ☐ Not applicable	
Flame detection test	☐ Passed ☐ Not passed ☐ Not done ☐ Not applicable	
Blocked / blurred test	☐ Passed ☐ Not passed ☐ Not done ☐ Not applicable	

Notes

Signature: