



INSIGHTS | 2021

A one stop guide to an end-to-end solution

Power on, connect and explore your cameras via the Device Management Portal. Then, download, install and run multiple apps to solve any use case.

Guide for Security Camera Users

Security and Safety Things
GmbH 2021
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INTRODUCTION

Welcome to the Azena Ecosystem

In this paper you'll learn all you need to get started in our open IoT platform. Dozens of sophisticated computer vision solutions are just a few clicks away.

Azena helps grow your business by providing an open IoT platform filled with diverse computer vision apps that can be applied to almost any use case.

Our platform for security cameras connects the ecosystems of camera manufacturers, application developers, integrators and customers to turn the best available hardware and software into groundbreaking security business solutions.

- **Integrators** gain access to a growing number of innovative apps for security cameras from all manufacturers. Each app can be installed and tested on camera systems with just a few clicks. Our Application Store offers the latest technologies and inspiration for innovative solutions.

- **Developers** get the platform, OS and tools they need to develop new apps not only for cameras from one single manufacturer, but for all available systems using our OS. Our marketplace gives developers access to a growing demand for smart security apps worldwide.

Azena helps both integrators and developers differentiate themselves from competition and enter new industries, through new solutions based on IoT standards.

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FIRST STEPS

The Platform Offering

The Azena platform is a combination of several components which operate in a collaborative nature.



Application Store

The central place to browse, evaluate and purchase video applications.



Azena enabled camera

Running secure OS based on AOSP, that enables deployment of multiple apps across cameras from many vendors.



Device Management Portal

Manage applications and cameras (sensors) in on- and offline environments including digital twin capabilities.



Device Management Tool

Discover cameras (sensors) in a network. Install applications on the camera in on- and offline environment.

FIRST STEPS

#1

Pre-requisites for getting started

Hardware:

- Azena Enabled camera.
- A host computer (Windows/Linux/Mac/Ubuntu) with Google Chrome browser.
- Local network (e.g. router and cables) to connect the camera and the host computer.
- POE – Power Over Ethernet (via router, hub or PoE adapter) to power the camera.

Network setup:

- Network with connectivity to internet (offline camera supported: not described in this document).
- DHCP Network (Using DHCP the camera automatically receives the IP address once connected to a network).

Software:

- Ecosystem credentials used across application store and Device Management Portal. Additionally you can also invite your colleagues to the account via the User Management¹.
- Download Azena Device Management tool² from the resources section and install on the host computer. The tool can be used for device discovery and installing applications on cameras in offline network.
- Our devices communicate to the external URLs which needs to be allowed in the network firewall³ – details can be found in the resources section to the left.

RESOURCES

¹User Management Guide:
<https://hubs.ly/H0xV2j40>

²Download Azena Device Management Tool:
<https://hubs.li/H0xYjtLO>

³Network Firewall Details:
<https://hubs.li/H0xYhkrO>

FIRST STEPS

#2

Discover and connect

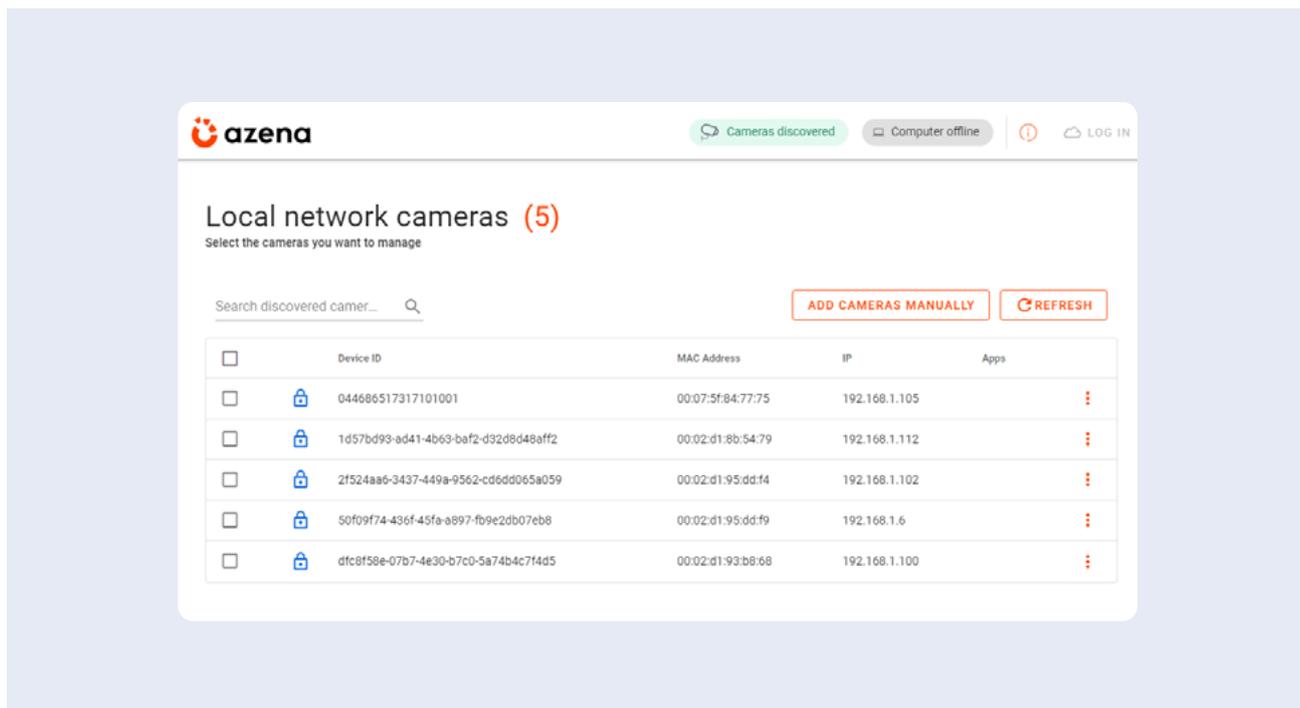
Power up the camera

Connect your camera to the network via Power Over Ethernet connection. Some camera models do have a light indication when turned on. Please refer to the manufactures documentation for more details.

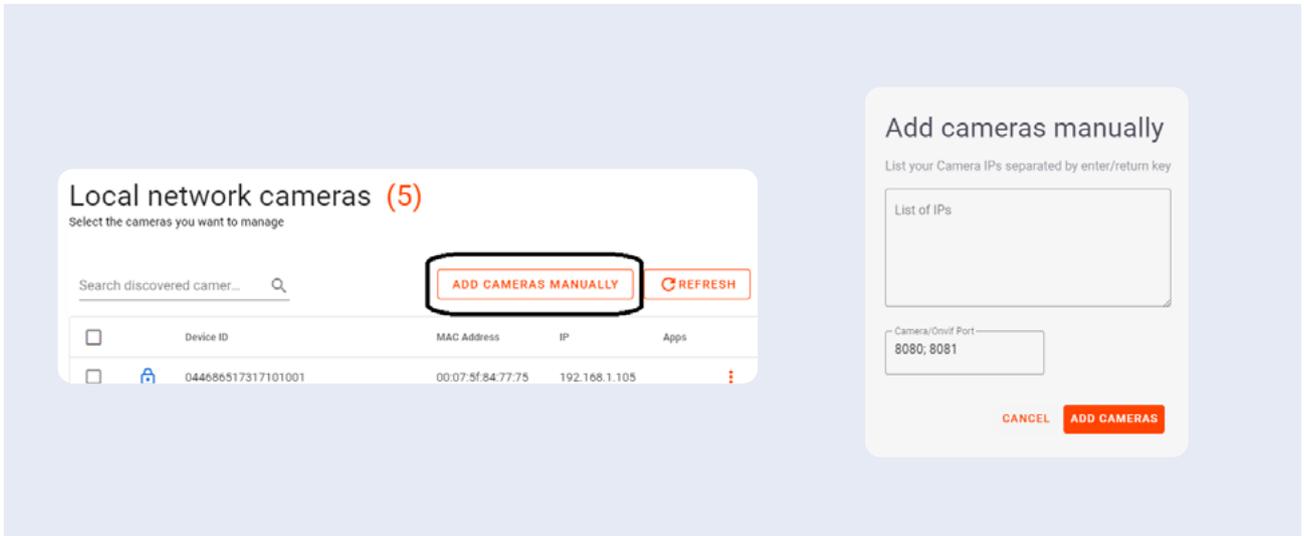
Discovering the camera IP (via Device Management Tool)

⁴You can also use 3rd party tools like Onvif Device Manager to discover the Azena enabled cameras.

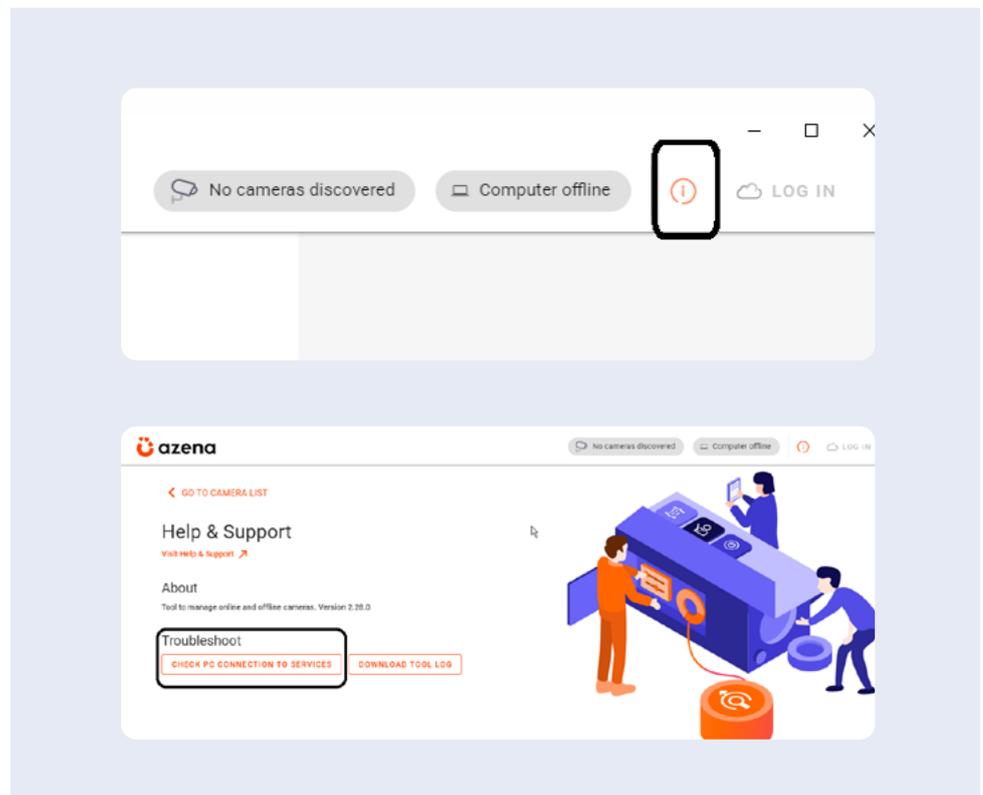
Once the camera has been powered on and connected to a DHCP network it should have received an IP address. To discover the IP address we use the Azena Device Management tool⁴. Start the tool² and it will automatically search for Azena powered cameras in the network.



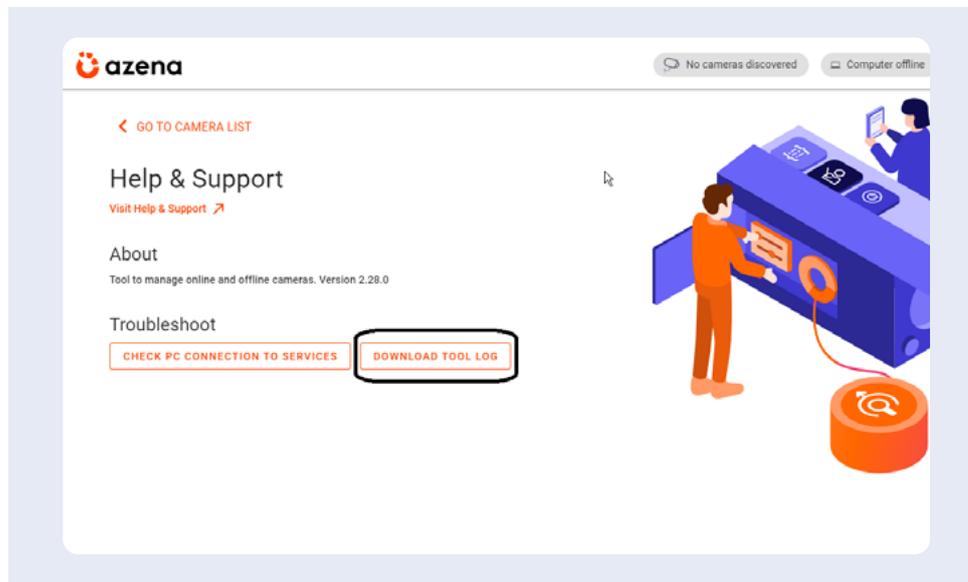
All Azena-enabled cameras in the network will show up as a list including information about the camera. You can also add cameras manually using their IP addresses.



There are some URLs which needs to be whitelisted in the firewall as mentioned [here](#). The connection to these services can also be tested using the tool.



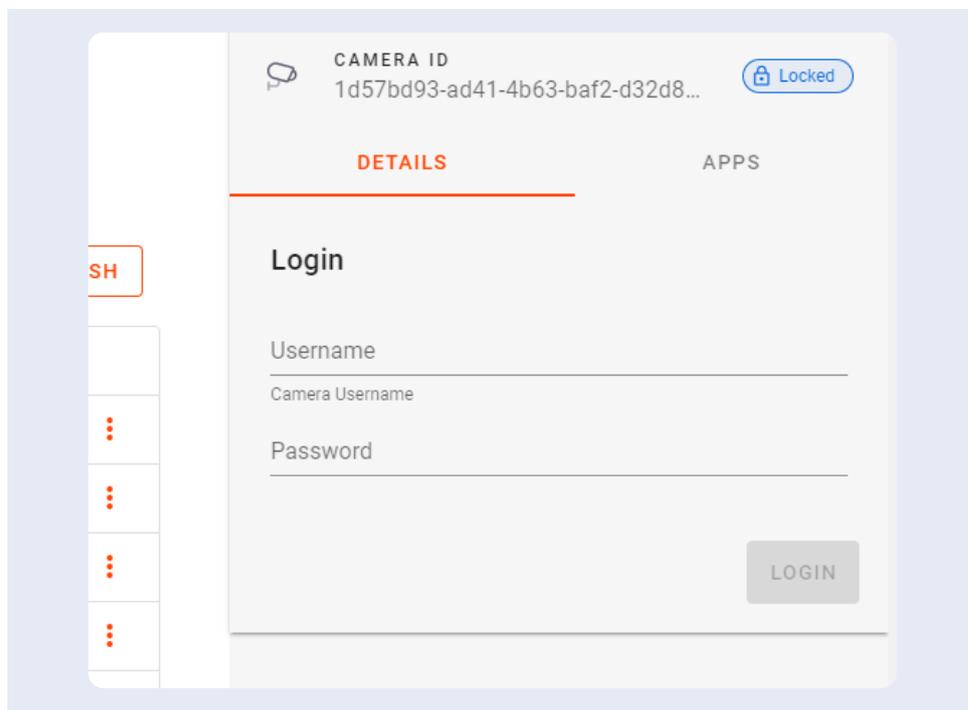
Further there also a possibility to download the tool's log files using the feature as shown in the image.



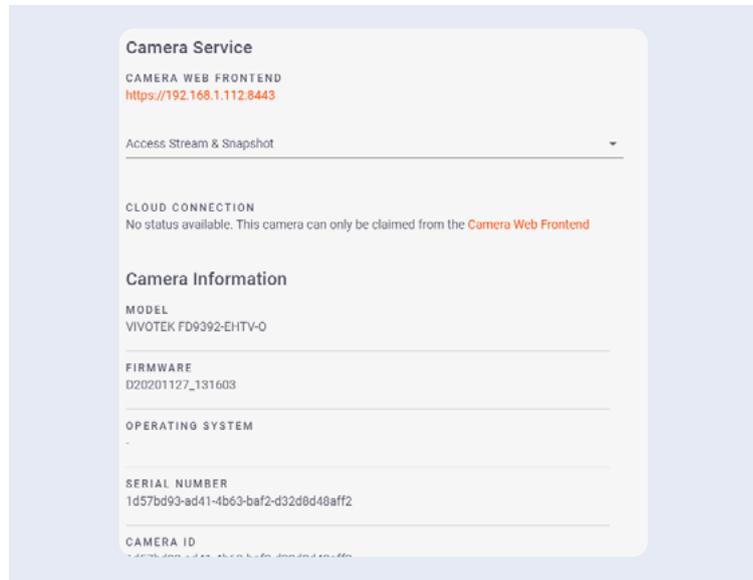
Connecting to the **Web User Interface** of the camera

- Click on the camera you want to access and on the right side a Login panel under the Details tab would appear.

The default username/password is admin/admin.



- Scroll to the “Camera Services” section on this panel and click on the link under Camera Web Frontend.



- Login to the camera frontend using the username and password – the default username/password are admin/admin. You will be required to set a new password after the first login.

Alternative Method for connecting to the Web User Interface of the camera

- The camera can also be directly accessed via the following URL from a browser (preferably, Google Chrome).
 - https://<CAM_IP> - here the <CAM_IP> can be obtained from the IP Port column of the Device Management Tool.
 - The default username/password is admin/admin and you will be required to set a new password after the first login.

Find a brief description of the camera User Interface here: <https://hubs.li/H0xYjvRO>

FIRST STEPS

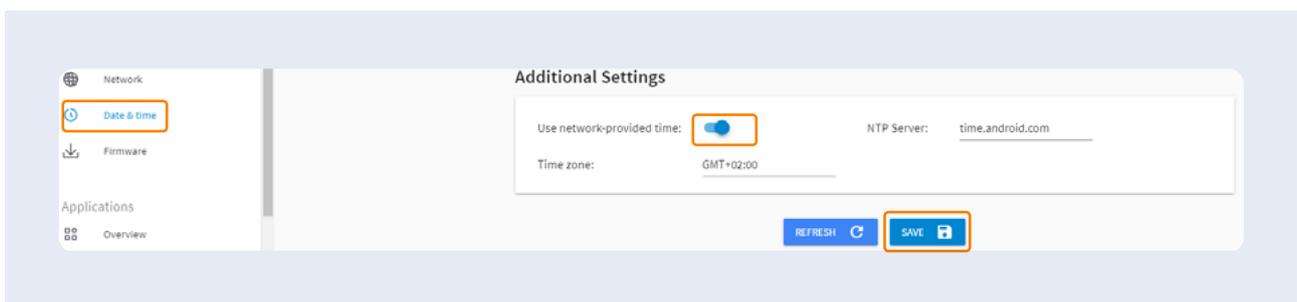
#3

Claiming the camera on the Azena Device Management Portal

To manage your device online via the Device Management Portal, you need to register your device once. Then you can remotely manage, install apps and maintain your camera. Click on the button below to claim the camera

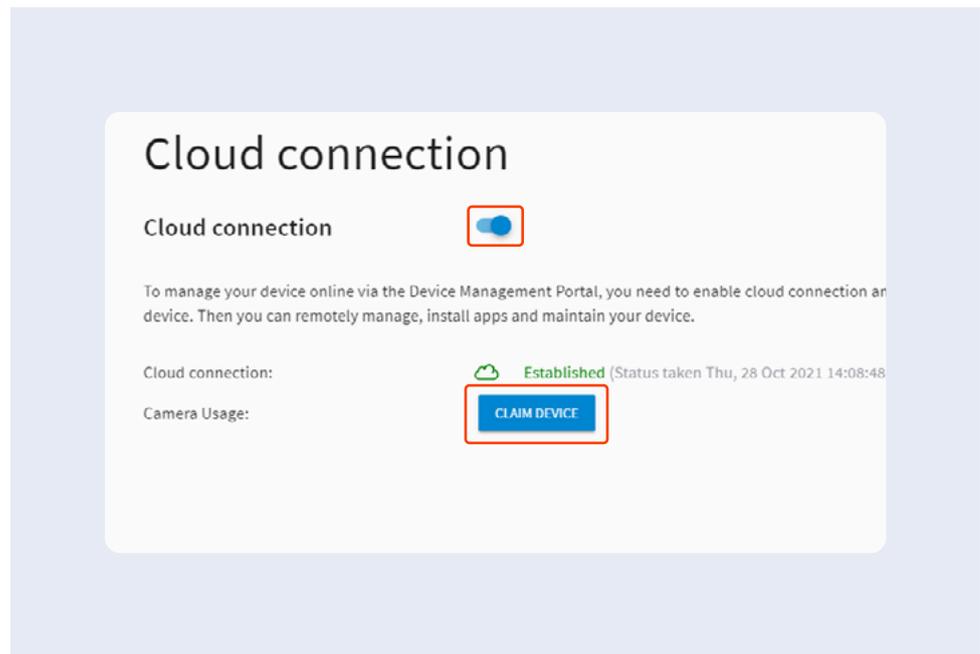
In order to synchronize the connection of the camera with the cloud, the date and time on the device should be set correctly.

- On the camera UI, go to the Date & Time page.
- Press enable on “Use network-provided time:”
- Click “Save”.

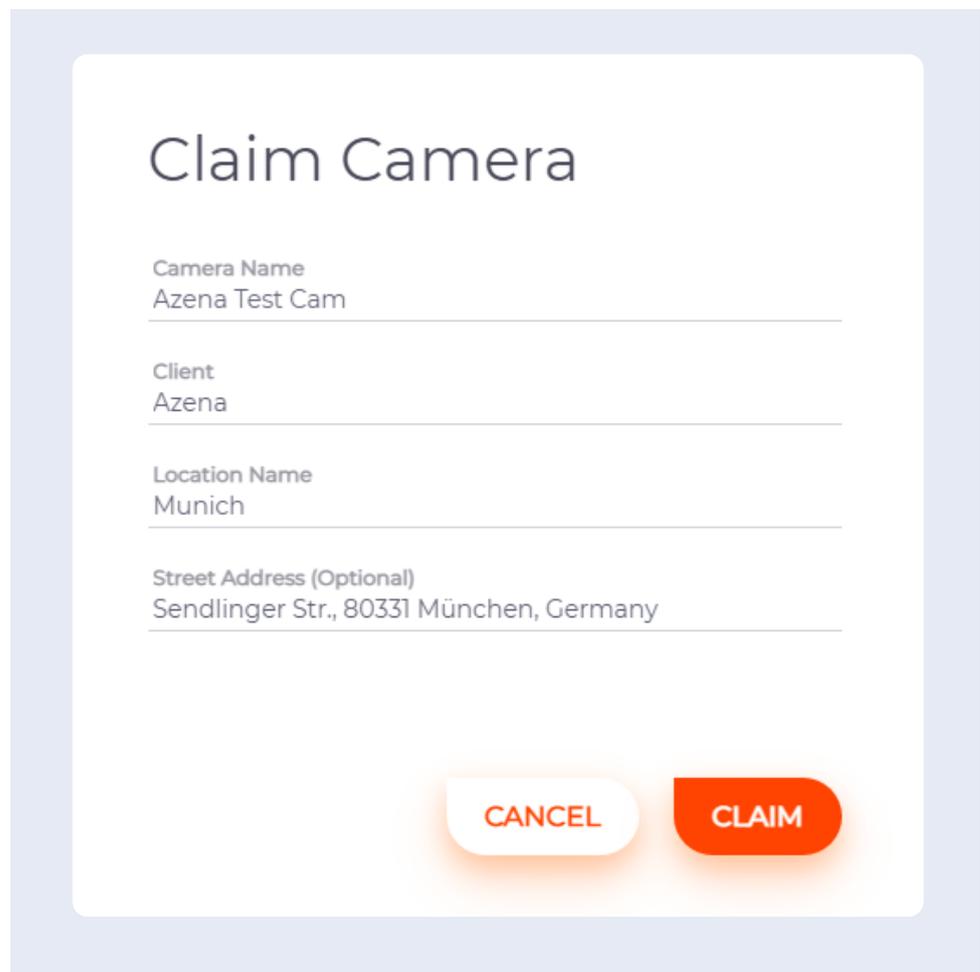


To be able to register your device on the device management portal you need to enable cloud based device management and claim the camera on the “Cloud Connection” page.

- Go to the “Cloud Connection” page.
- Press enable for “cloud based device management”.
- Click on “Claim Camera”. A dialog box will open, and you should press “Claim” again. Then, you will be redirected to our Device Management Portal.



On the Device Management Portal, a new dialog box will open. Please fill in the camera details and press save. Congratulations! The camera is now successfully added to the Device Management Portal.



Link to the knowledge base:
<https://hubs.li/H0xYhkDO>

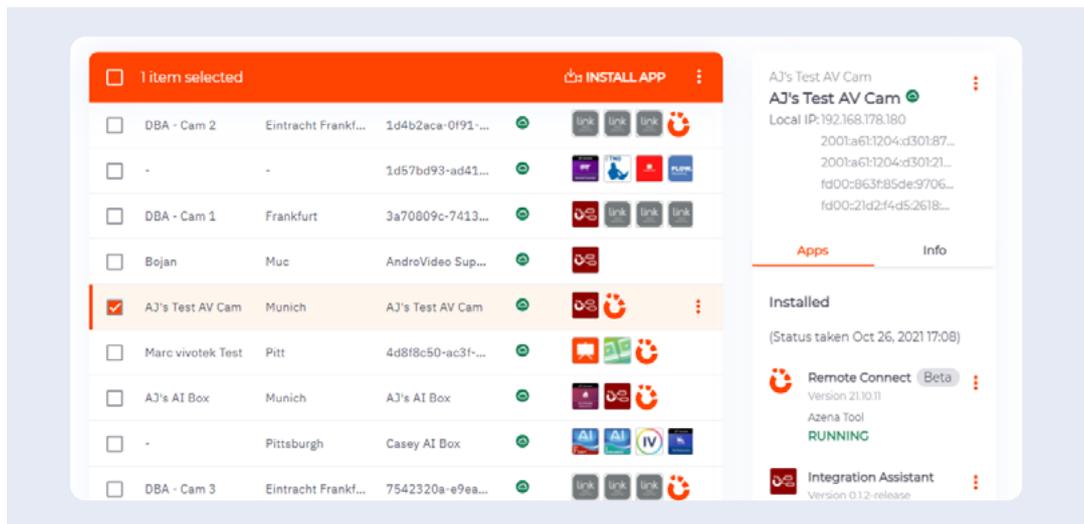
APPLICATION STORE

How to browse, acquire and install applications.

#1

Navigate to the store from the Device Management Tool

On the Device Management Portal, you will find your camera by filtering the ones which are Online in “Status”. Then, select the camera(s) and press the Apps Tab on the right panel. There you will find the: “Go to Application Store” link.



Now, browse the Application Store to search for the application of your choice, which you can purchase or request for a trial license.

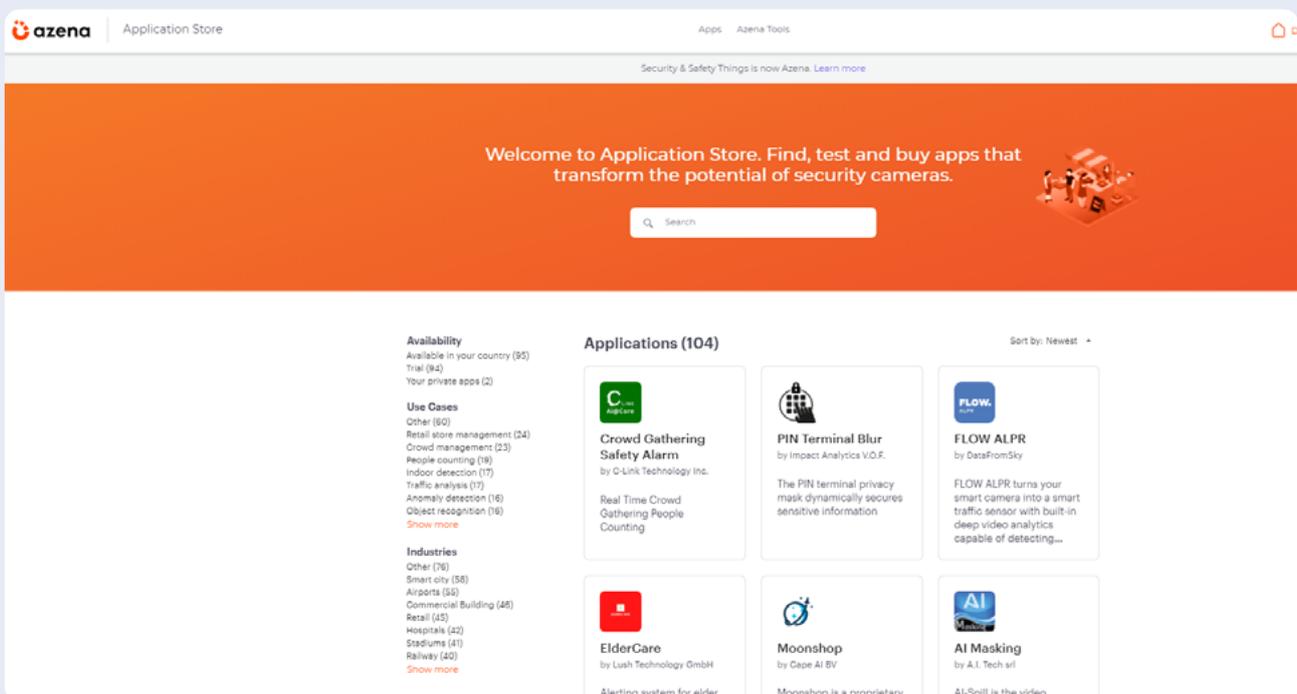
APPLICATION STORE

#2

Browse Application Store and find apps

Upon entering the store, you get an overview of all the apps available.

Search for apps by name, developer and use cases



You can find apps by either typing into the search bar or navigating on the left side panel. There you will find tailored solutions divided by use cases, such as retail store management, crowd management and COVID-19.

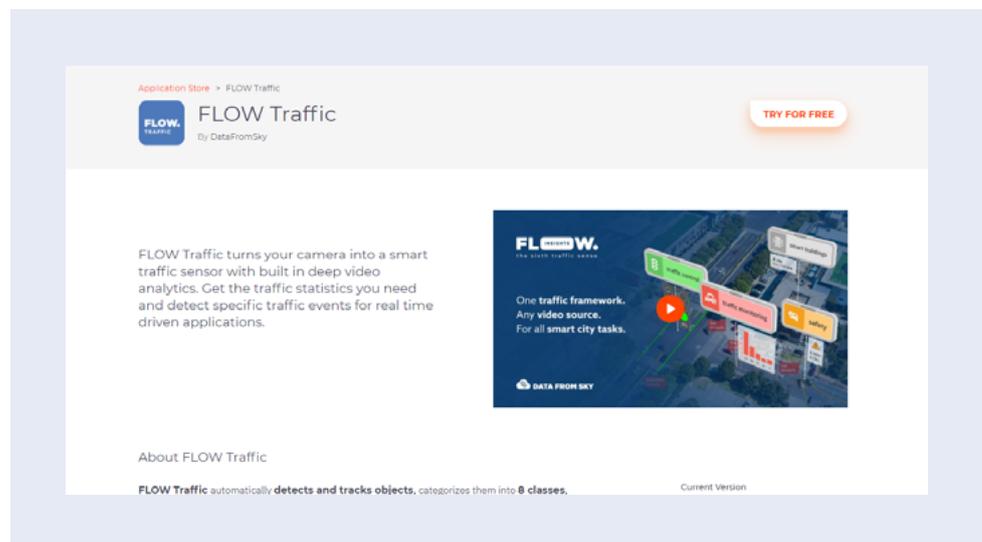
You can also find apps separated by industries, with a custom selection we have made focused on airports, commercial buildings, smart cities, stadiums and even art museums, among many others.

Get an idea of each app's functionality, use cases and developer details

Detailed information about each app on dedicated pages:

- App provider
- Number and result of user reviews
- Number of purchases
- App description (short and long form)
- Preview screenshots
- Documentation for download (if available)
- Version history
- Availability (countries)
- Provider's terms of use
- Link to provider's website
- Provider's privacy policy
- Required OS version
- App permissions
- Prices, free trial (if available)
- Provider's support (email, website, phone)

An example page of a test app in the Application Store



See how other users rate the apps and browse their comments

You find user ratings and experiences of other users at the bottom of each app detail page. Feel free to give your feedback here, whether you're 100% satisfied with an app or see room for improvements. The Application Store is the place where everyone, users and developers, come together to create the best solutions for security IoT.

APPLICATION STORE

#3

Buy and download apps from the Application Store

Downloading and installing apps for your cameras is as easy as searching and clicking. The Application Store works in the same familiar way as other online shops.

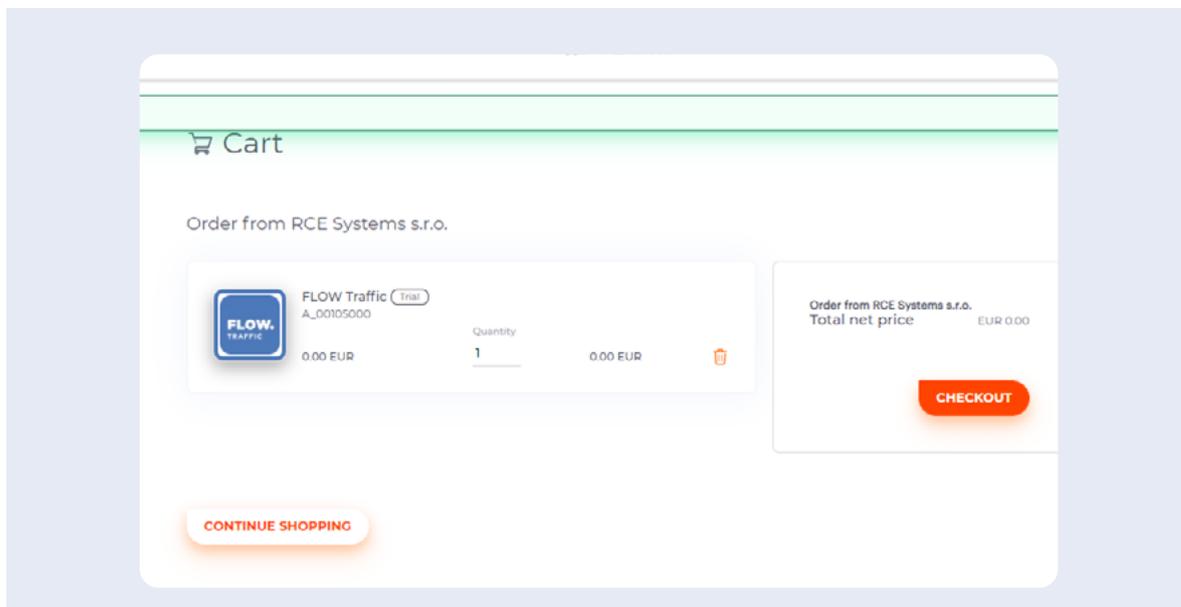
Add an app to the shopping cart with just one click

Simply select the number of licenses you need for your cameras in the app page's "pricing" section and click "add to cart".

If a trial version is available, you can install the app for free and test it for 30 days. Each trial license expires automatically after this period.

Place orders and checkout securely

After adding an app to your shopping cart, you're taken directly to the order summary. You also get there by clicking the shopping cart symbol at the top of the page.



When you're ready to buy, just click "place order". The new app is immediately added to your apps. You get there by clicking "applications" in the navigation at the top of the page. With every purchase you'll receive a confirmation email.

The screenshot shows the Azena Device Management Application Store. The interface includes a sidebar with navigation options: Cameras, Applications (highlighted), Subscriptions, and Application Store. The main content area is titled "Applications" and features a table listing various apps. The "Person Anonymizer" app is highlighted, and its details are shown on the right side of the screen.

App Name	Developed by	Trials	Subscriptions	One-time purchase
Person Anonymizer	TNG Technology Consult...	4457	-	-
PackageAlert	Sparkline, Inc.	0	-	-
PPE Inspection	Noctuai Sp. z o. o.	20	-	-
Link Shopper Flow	Link Analytik AS	1	-	-
AI Retail	A.I. Tech srl	9	-	-
FLOW Parking	RCE Systems s.r.o.	2	-	-
Integration Assistant	Security and Safety Thi...	4	-	0
AI Heat	A.I. Tech srl	9	-	-
AI Crowd Deep	A.I. Tech srl	8	-	-
Perimeter protection	IntelliVision Technolog...	2	-	-
Intruder Detection BETA	Elias Kardel	0	-	-
Eyespect Beta	Hesham Omran	2	-	-
Animal Counter	Noctuai Sp. z o. o.	0	-	-
AM Line Crossing	BERGMAN Deutschland...	4	-	-
ParkingProtect	Sparkline, Inc.	0	-	-

Person Anonymizer
None Available

Details

Description

Important: This app is no longer maintained. Please use our "Dynamic Privacy Mask" app instead.

Anonymizes people in video streams. For demo purposes only.

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[Application Store Link](#)

Trial Available (4524 Total)
4457

Top tip:

You'll find an overview of all your orders in the "Order History" section, in the profile menu in the upper right corner of the Application Store.

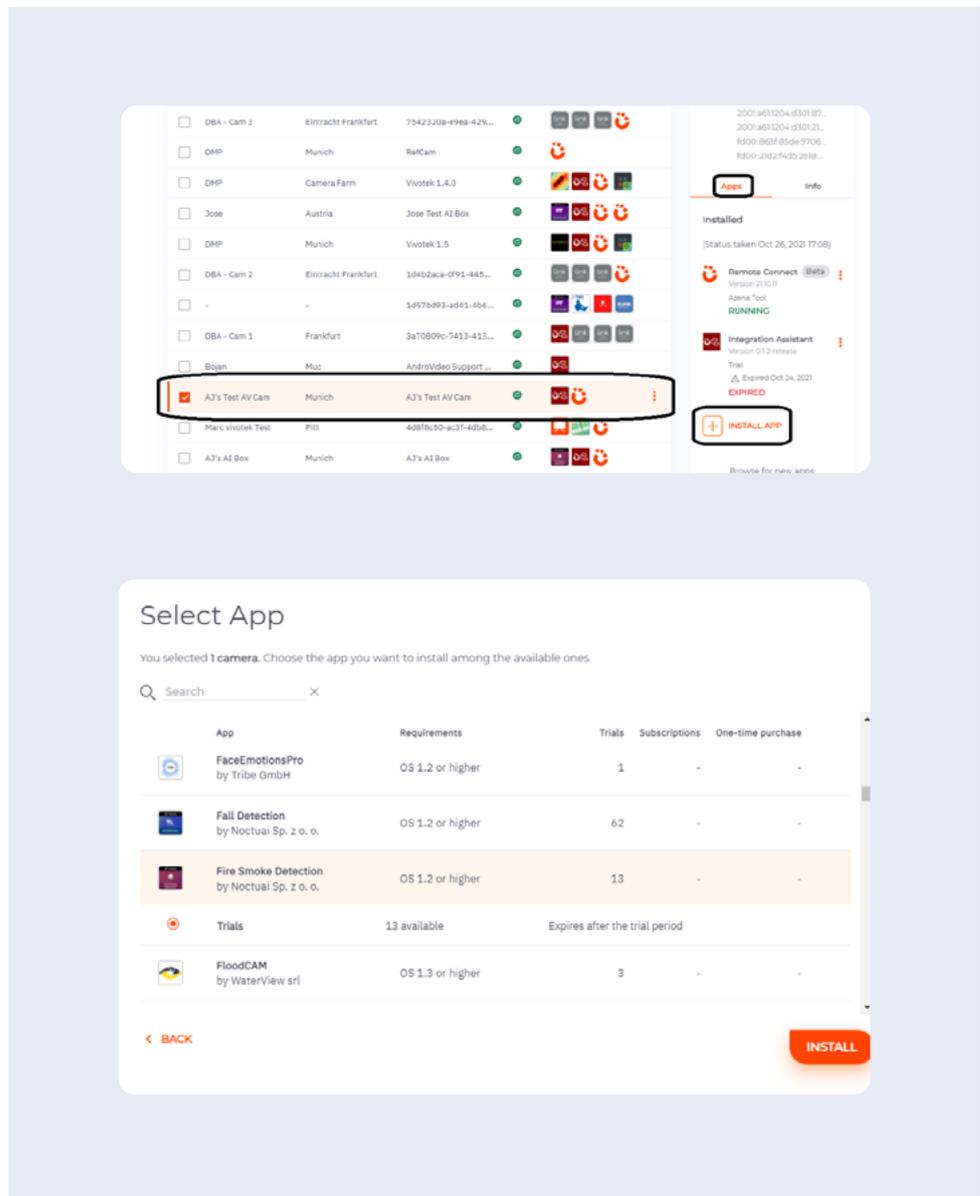
APPLICATION STORE

#4

Install apps in your device

Back to the "Cameras" page on the Device Management Portal, simply press "Install App". A dialog box will open up, and you can just install the software from there.

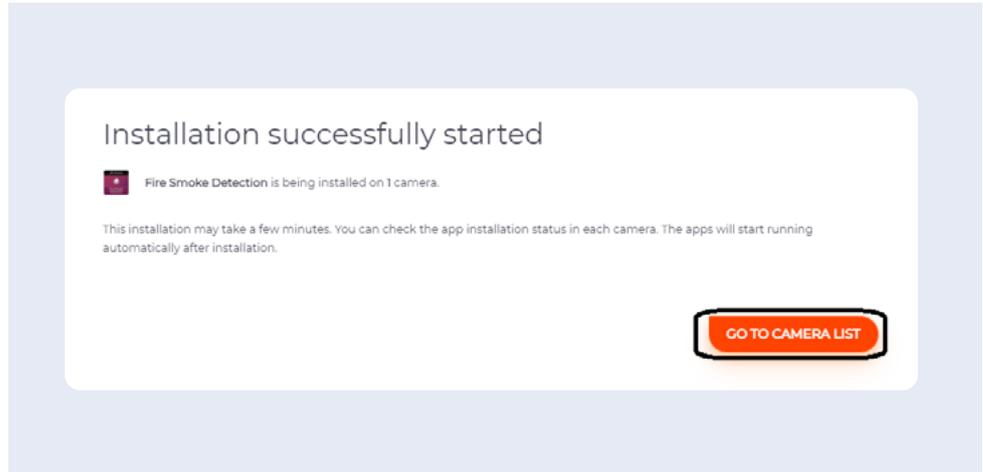
By the publishing time of this guide, we have over 70 apps from more than 20 different developers in our Application Store.



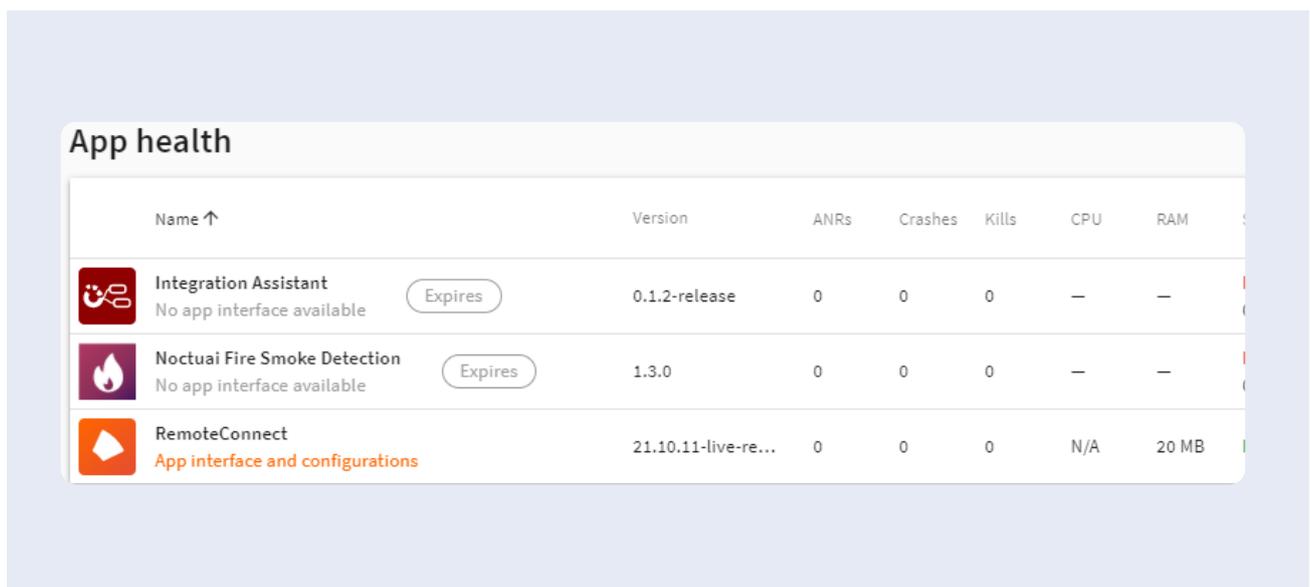
Finalizing installation

The installation process might take it up to 30 seconds. You can now access the app UI from the Camera List.

Link to the knowledge base:
<https://hubs.li/H0xYjBjO>



After you accessed the camera frontend, on the “Overview” page, you can see the list of installed applications. Click on the “App interface and configuration” button to gain access to the application’s UI.



RESOURCES

Refer to the resources below for a quick guide

Product Manual

The central repository of all the manuals. Consists knowledge articles for application management, camera setup etc.

<https://hubs.li/H0xYjCf0>

FAQ

Consists responses to frequently asked questions about all parts of the ecosystem viz. camera, applications, user management etc.

<https://hubs.li/H0xYjFq0>

Release Notes

Consists of most important details about the latest cloud and OS releases

<https://hubs.li/H0xYlt50>

Support request channel

Support queries can be submitted here

<https://hubs.li/H0xYjGw0>

Camera information

Request for a camera catalogue by filling out your details or contact our trusted camera partners directly via the link

<https://hubs.li/H0xYltl0>



About us

At Azena, we connect camera manufacturers, SoC providers, application developers, VMS providers, and systems integrators through a game-changing platform. Our goal is to accelerate the speed of innovation for security cameras and applications that make use of AI and computer vision.

Azena is a fully owned but independent Bosch company head-quartered in Munich, founded in September 2018.

Our Platform

We have designed a global platform for security camera applications.

Today, we offer a free and open operating system for security cameras, a development tool kit for app developers and an Application Store for integrators as well as a device management portal.

For more detailed information on Azena, please visit:

www.azena.com

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