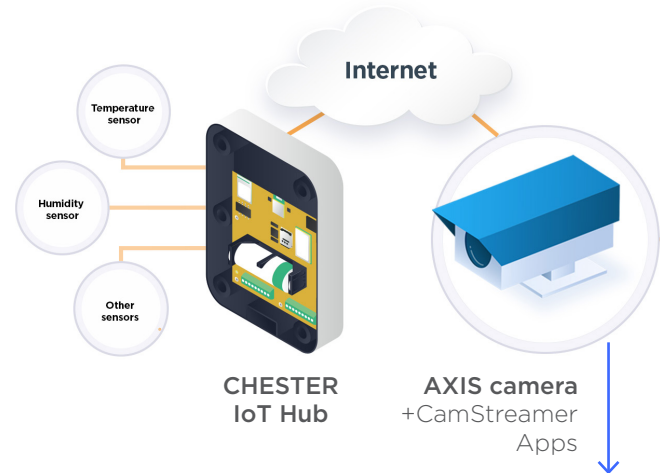


Case study

CamScripter App integration with CHESTER IoT Hub shows data in live stream

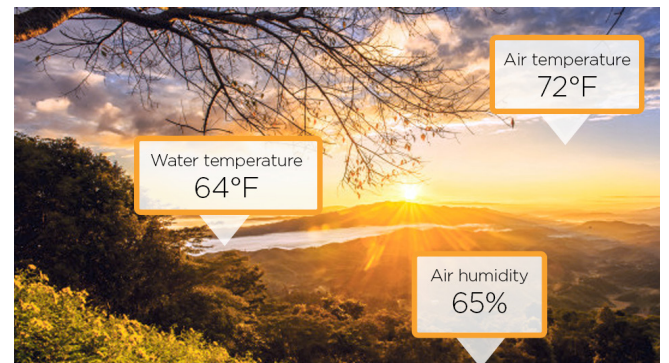
Mission

At the request of our clients, we've created a **micro-application that is able to download data from their specific products and automatically embeds them into live broadcasts**. Another example is integration with IoT devices from the Hardwario company. The devices process data from a whole range of environmental sensors, making it possible to implement many IoT projects. Hardwario operates its own cloud, which makes it possible to access the measured values. That's why it seemed to us like an interesting idea to directly display the data from these great sensors dynamically in the camera image, allowing camera owners to better orient themselves.



What is the IoT hub Chester

Thanks to its temperature range and durability against dust and water, the IoT Hub CHESTER is used in demanding outdoor projects in the field of agriculture, forestry, water management, and industry. The device communicates via LPWAN technologies such as NB-IoT or LoRaWAN even in places where a normal Internet connection is not available and works on batteries for several years.



Solution

We've created a micro-application that runs in the CamScripter App, which downloads data from the Hardwario company's application interface. This data is then displayed on the camera via the Custom Graphics widget. In this widget, values are embedded into the prepared graphics and then automatically updated every 60 seconds and during configuration changes.

Hardware:	AXIS camera
	IoT Hub CHESTER
Software:	CamOverlay App
	CamStreamer App
	CamScripter App
	Script for the CamScripter App on GitHub

Result

"In this case, CamStreamer apps provide an overview of values directly in the video, which are important for specific projects, primarily in agriculture, forestry, water management, etc.," Filip Hanek, Product Manager of CamStreamer explains. Thus, it can help in solutions from the Hardwario company (monitoring air quality in the Liberec Zoo, controlling undesirable temperatures and humidity as stress prevention for the animals; monitoring heat and humidity in cable boxes; in British forests, etc.) **This integration will also be handy for situations where the camera covers an extensive area in which Chester IoT HUB devices collect data in various sites (e.g. data on ground soil moisture) and the camera owner wants to have data directly in the image for better orientation.**

See the following **How to set up guide**.



Case study

CamScripter App integration with CHESTER IoT Hub shows data in live stream

How to set-up integration of IoT devices from the Hardwario company

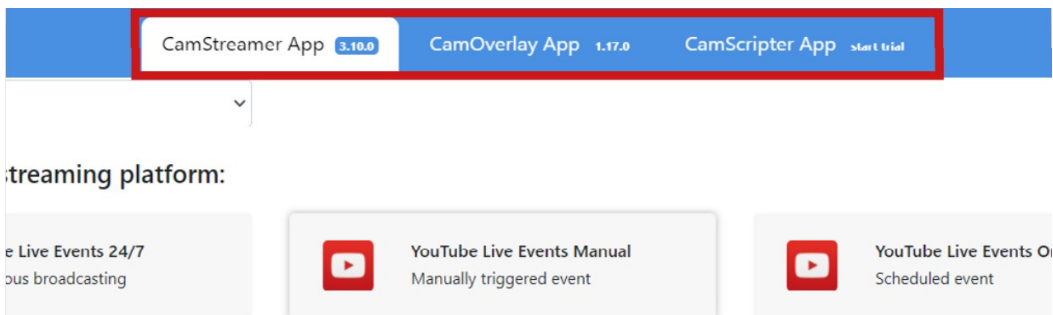
How can we display current data from IoT Hub CHESTER devices, which monitor physical values and are used in many fields? We've created more micro-applications that run in the CamScripter App and download relevant data. You'll find out how below in our use case.

What do you need?

- [An AXIS camera](#) (check compatibility [here](#))
- Our [CamScripter App](#) and [CamOverlay App](#)
- An [IoT Hub CHESTER](#) device
- Script for the CamScripter App on [GitHub](#)

Tip: Get a free 30-day license on camstreamer.com. Try everything out before making a one-time purchase of the license.

1. Install the CamScripter App and CamOverlay App in your camera (you can do this via the upper bar in the CamStreamer App).



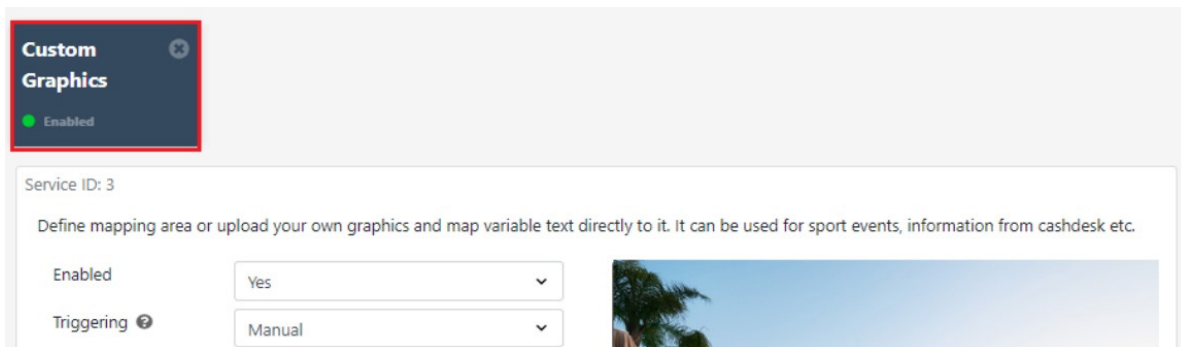
2. Download the current Hardwario package at https://github.com/CamStreamer/CamScripterApp_packages_to_use/blob/master/hardwario.zip

CamStreamer Merge pull request #3 from CamStreamer/hardwario ...			586c590 on 14 Jan	🕒 28 commits
📄 README.md	Update README.md			2 years ago
📄 aqi_app.zip	AQI fix			last month
📄 clockAnalog.zip	Packages updated.			12 months ago
📄 clockDigital.zip	Packages updated.			12 months ago
📄 doorController.zip	Packages updated.			12 months ago
📄 hardwario.zip	Hardwario commit			last month
📄 twitter-statuses.zip	Packages updated.			12 months ago
📄 weatherflow_app.zip	WeatherFlow add			last month

Case study

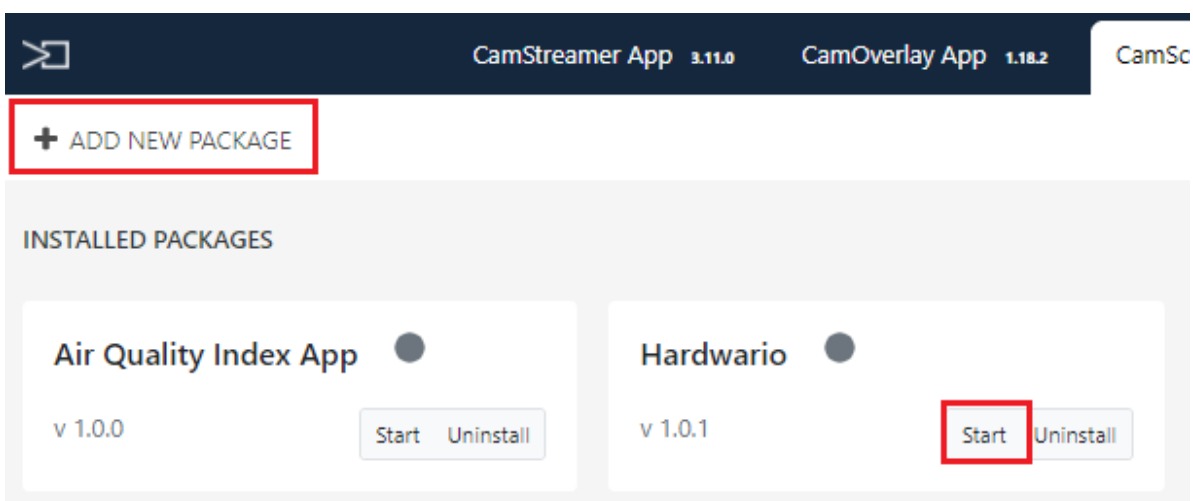
CamScripter App integration with CHESTER IoT Hub shows data in live stream

3. Import the **Hardwario_CamOverlayApp_Custom_Ovelay.json** file to the CamOverlay App to the Custom Graphics service. Based on your resolution for broadcasting, select the 4k or FullHD option. Change the widget to fit your needs in Custom Graphics.



Tip: If the widget is modified in the CamOverlay App, either wait 60 seconds for it to be displayed or turn the micro-application off and then back on from the CamScripter App environment.

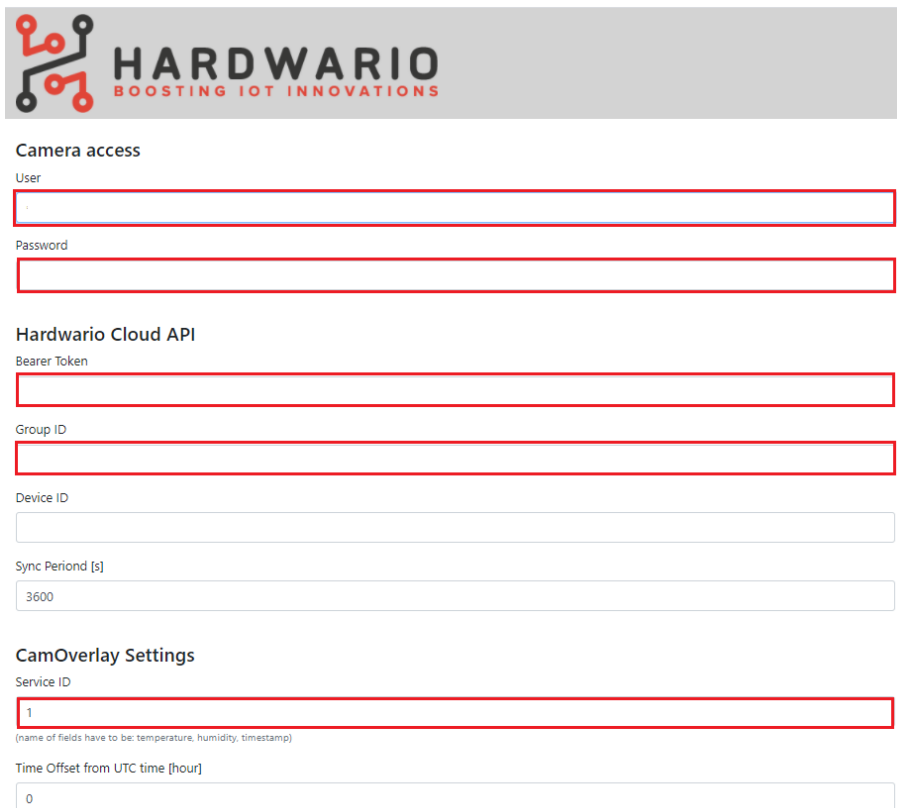
4. Upload the file „**hardwario.zip**“ to the CamScripter App and press „**Start**“. Open the micro app via the settings icon.



Case study

CamScripter App integration with CHESTER IoT Hub shows data in live stream

5. Insert your ID and token and select the unit system you want to use. Each service in the CamOverlay App has its own ID, and the correct ID of the service in which data is to be displayed must be listed in the micro-application's configuration.



HARDWARIO
BOOSTING IOT INNOVATIONS

Camera access

User

Password

Hardwario Cloud API

Bearer Token

Group ID

Device ID

Sync Period [s]

CamOverlay Settings

Service ID

(name of fields have to be: temperature, humidity, timestamp)

Time Offset from UTC time [hour]

6. Set the service ID of Custom Graphics in the CamOverlay App.

CamOverlay Settings

Service ID

(name of fields have to be: timestamp, airTemperature, barometric)



camstreamer.com/resources/chester-iot-hardwario

7. Now, check out the widget in the picture! .

If you have **a request for a tailor-made micro-application** to be created for you, please don't hesitate to contact us: support@camstreamer.com