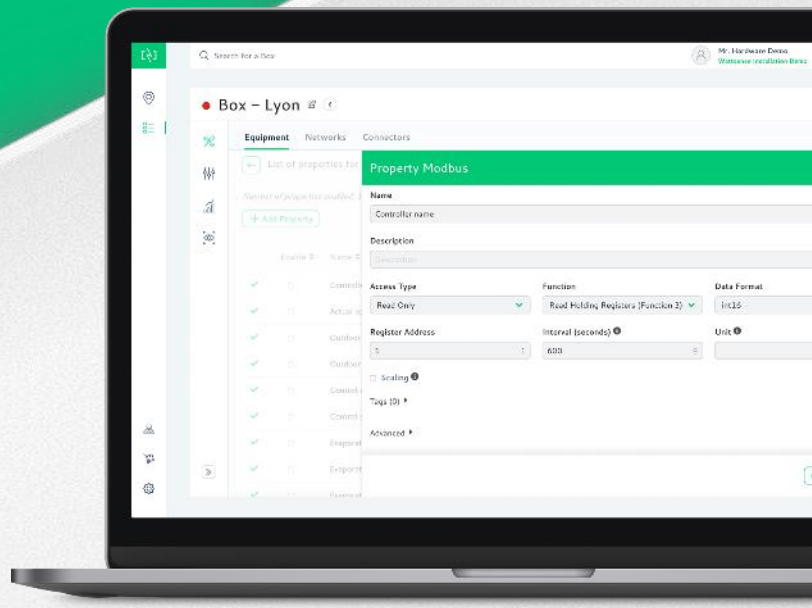
wattsense

Technical presentation



Lorawan evolution

General

By redefining the **most appropriate Spreading Factor**, we have improved how our server adapts its connection to a device to maximize its battery life (article coming soon)

SF 12

SF 7

Lorawan evolution

Sending downlinks for class C devices has been revised.

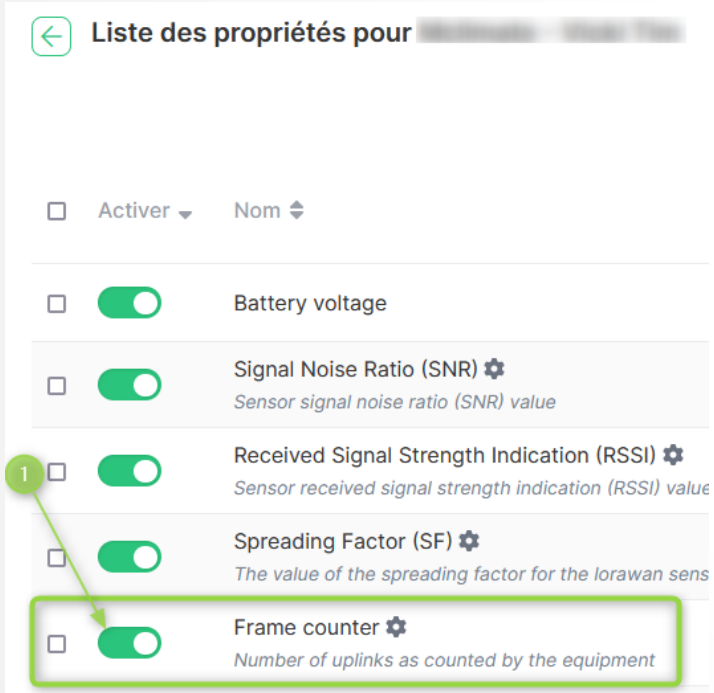
You can send downlinks in bulk to class C devices like with class A devices
(1 downlink only in the queue)

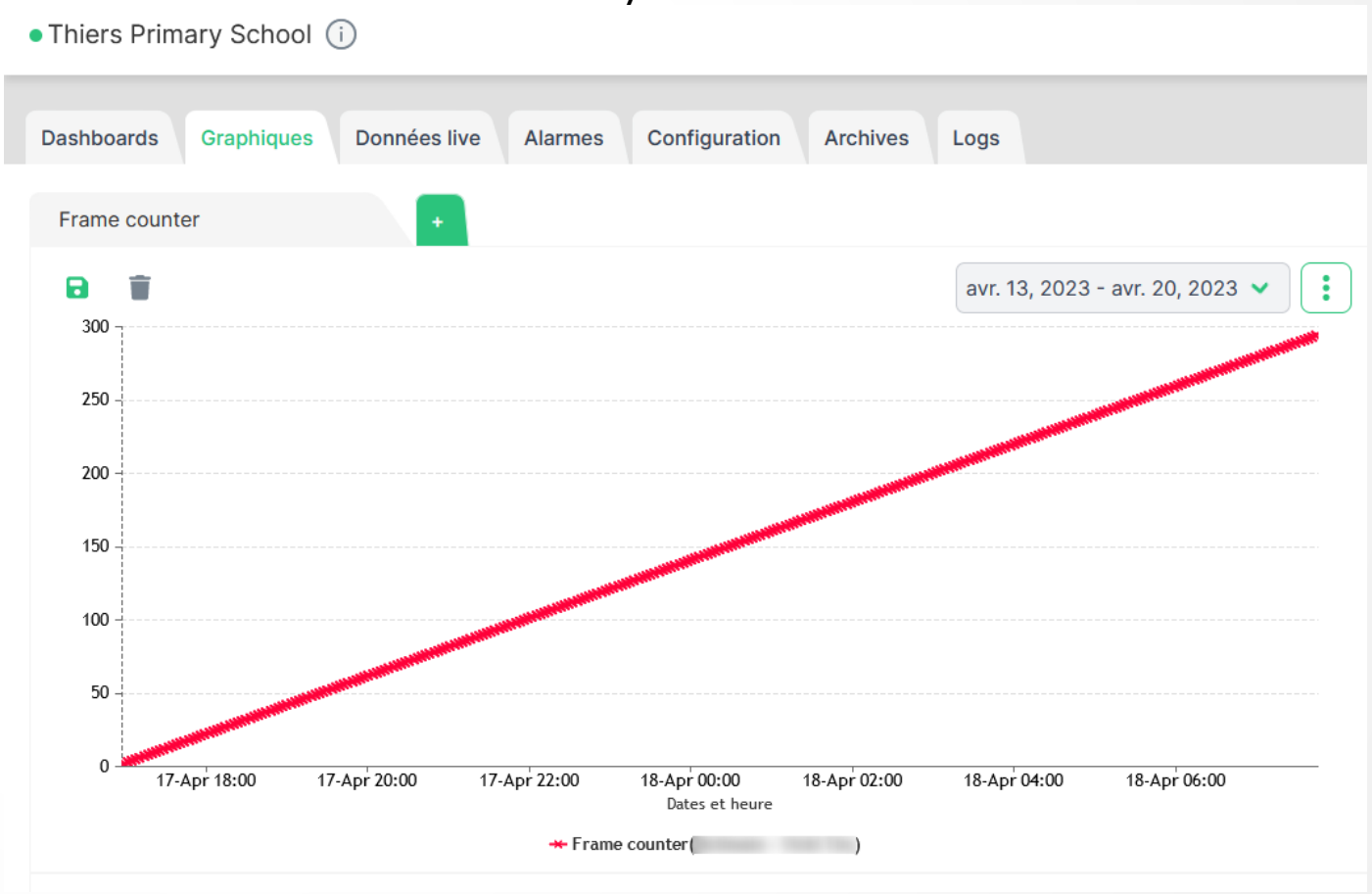
Our embedded server will transmit class C devices downlinks with a 13 seconds delay.

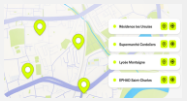
Lorawan evolution

Frame counter

Finally, the frame counter is a new property available **for free** for all your LoRaWAN devices. Thanks to it, you can ensure that your Wattsense box receives the frames correctly.



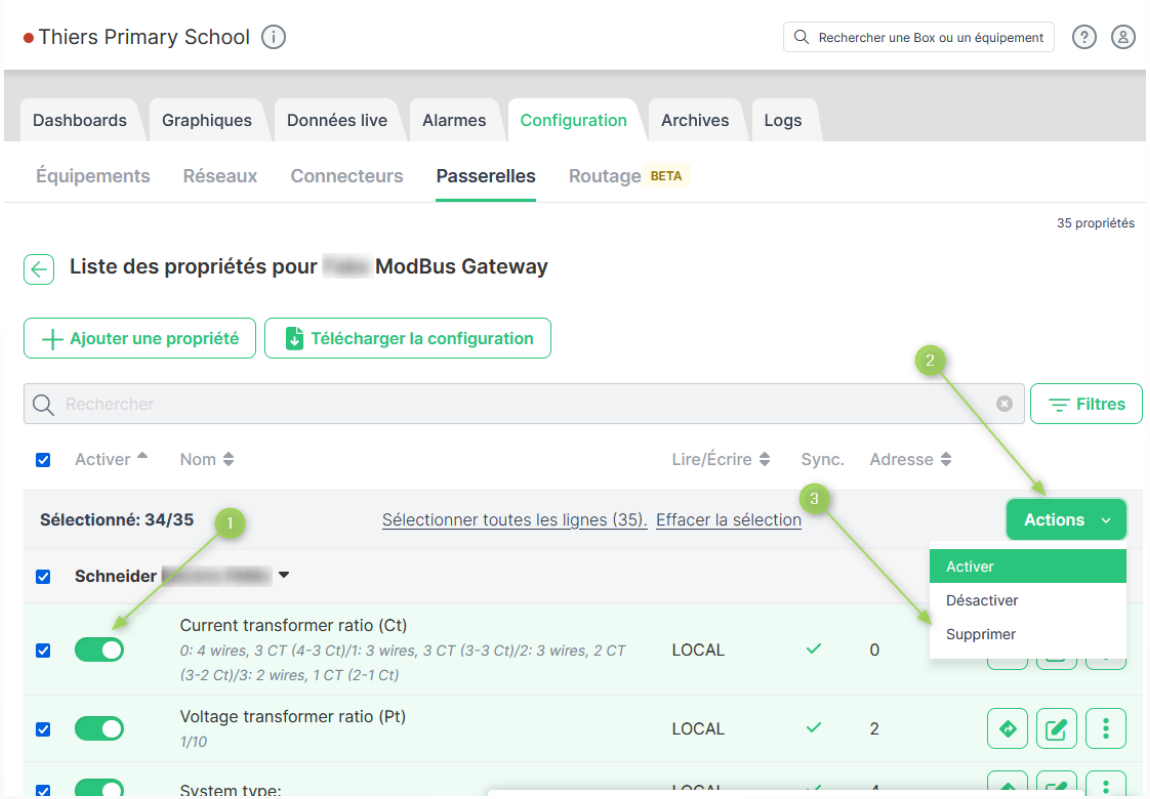


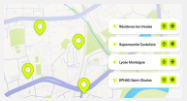


User console and UI

Bulk edition of properties

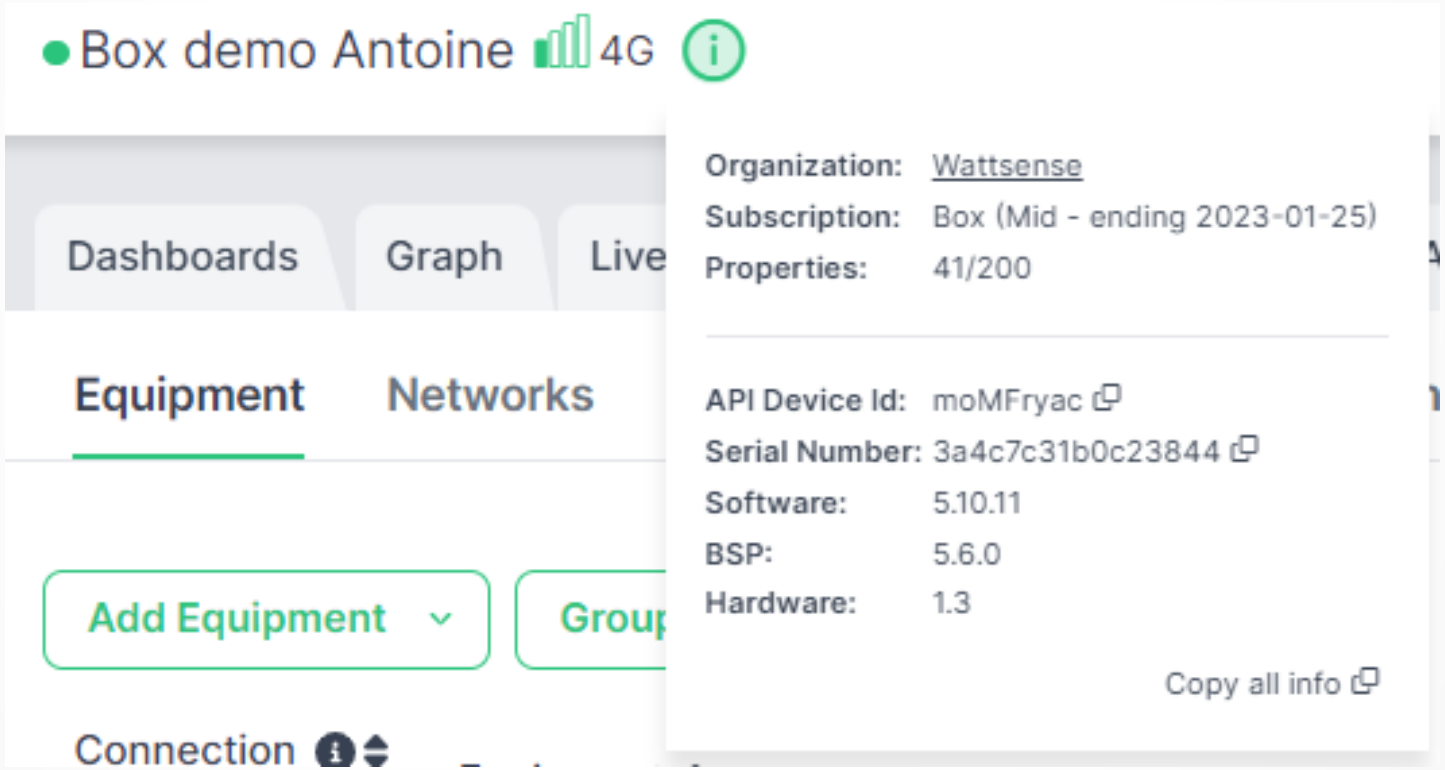
Too many properties added to a gateway by mistake?
It is now possible to mass edit the properties of a single device or gateway to activate, deactivate or delete them through a new interface

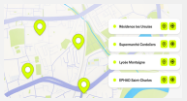




User console and UI

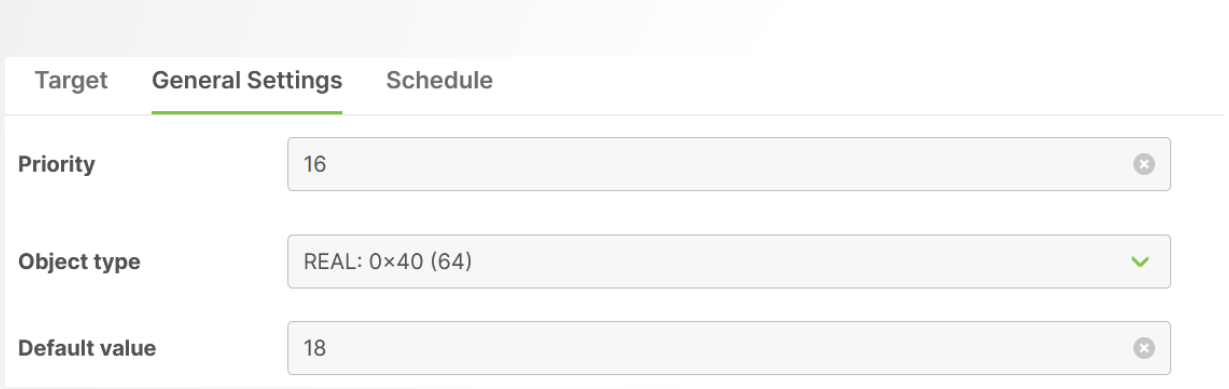
Under the icon ⓘ to the right of your box name, you can see the number of properties counted in your subscription.

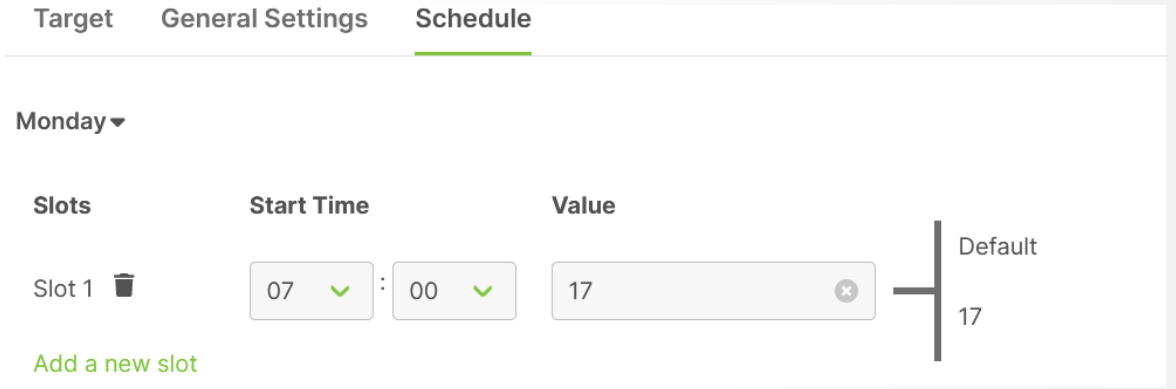




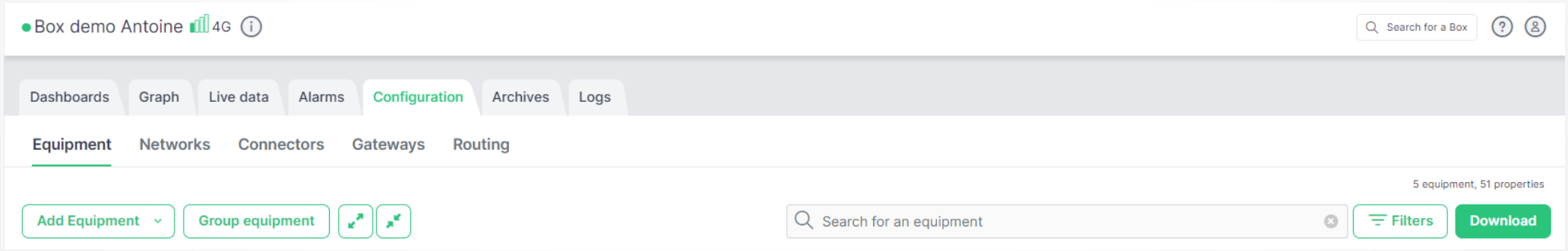
Other enhancements

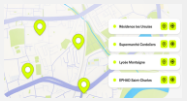
In the same way you can edit a schedule for a Siemens RVL or Siemens Synco, it is now possible to edit a schedule in BACnet format.





Download your equipment's configuration and properties in one click from the "Download" button on the Configuration screen.



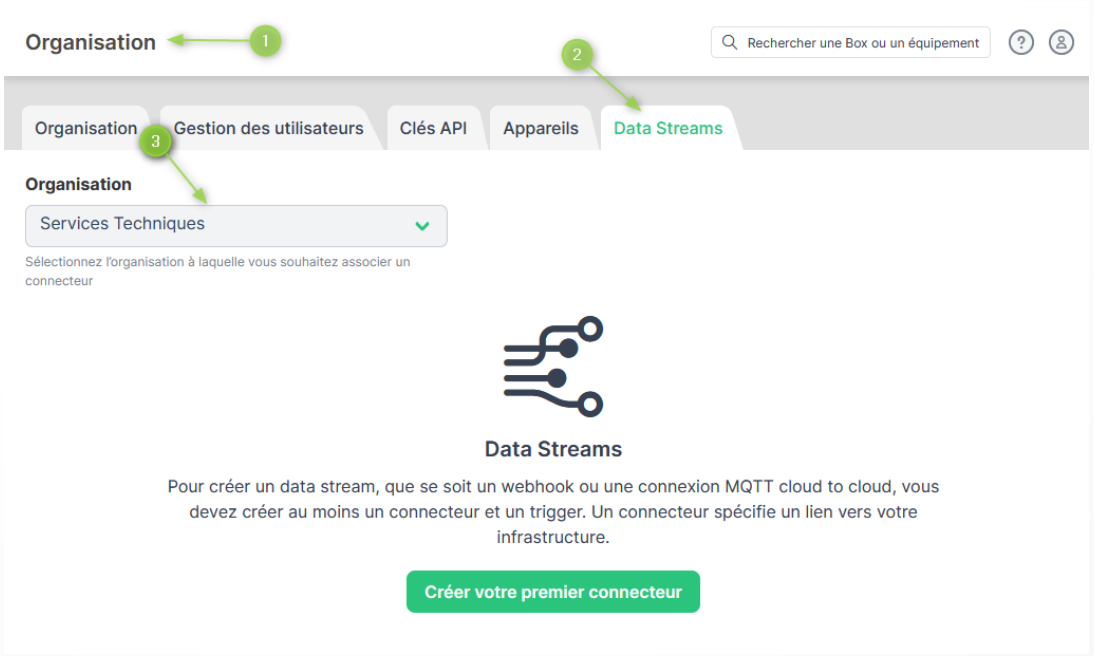


Other enhancements

Create webhooks in the console - Box only

To retrieve your property values or be alerted to an alarm directly in your tools, you can now create data streams from the console.
A data stream is a connection between Wattsense servers and your servers, which can be either a webhook or a cloud-to-cloud MQTT connection.

This feature was previously only available via API and is **now directly accessible from the console**.



We are delighted to bring these changes to you, starting with APPS **5.10.5.** Please contact our support team if your device is running an earlier version and needs to be upgraded.

Next Steps

Restricted use

2023 Objectives for the R&D team excluding hardware

Scalability - Provide a global and robust solution to support the growth of our resellers, adapted to the diversity of cases encountered in the field

Upgrade Equipment Database - Turn the equipment database into a fully-fledged product

Extend Core Features - Do more than what is expected of a gateway and data availability, with differentiating functionalities

Control - Going beyond data visualisation to equipment control

Restricted use

2023 R&D Focus

It will be a **successful year** from a functional point of view **if** we make available by the end of this year, at least:

- **Virtual properties** available in the console for Boxes
- **Weekly schedules** available in the console
- First prototype produced and available in the office of the **BoxNG**

Restricted use

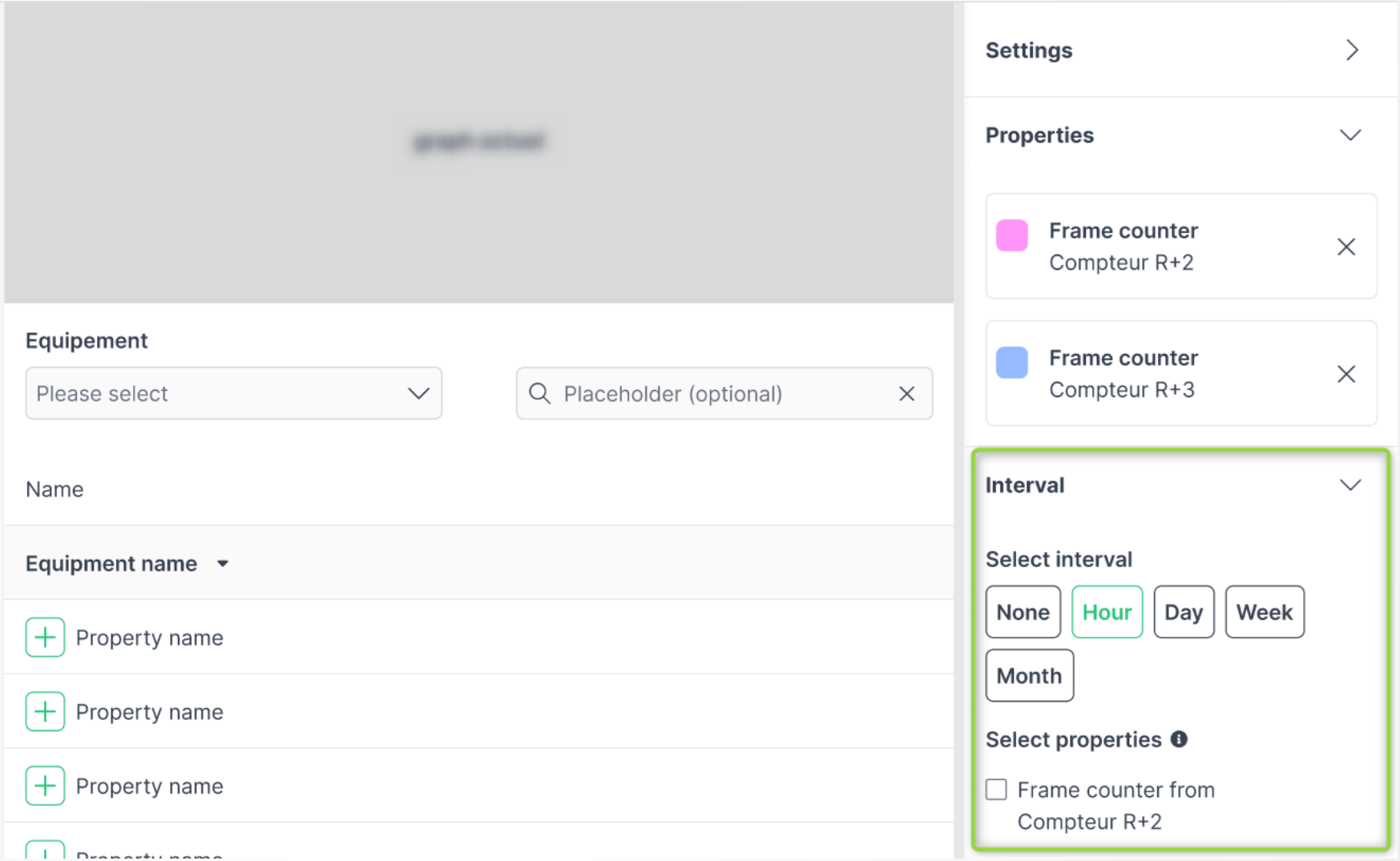
2023 Q3 outlook

- **Equipment database**
- **Virtual properties** with the calculation of consumptions as a first iteration
- **Weekly schedules** with a focus of occupied/not occupied and their relationships with alarms and HVAC controllers
- **Order management** improvements (cross departments effort)
- Roll out **core features** following the new architecture of the embedded: keep the latest values after reboot, redirect scaled values locally

Restricted use

2023 Q3 outlook – Zoom on virtual properties (Box/Tower only)

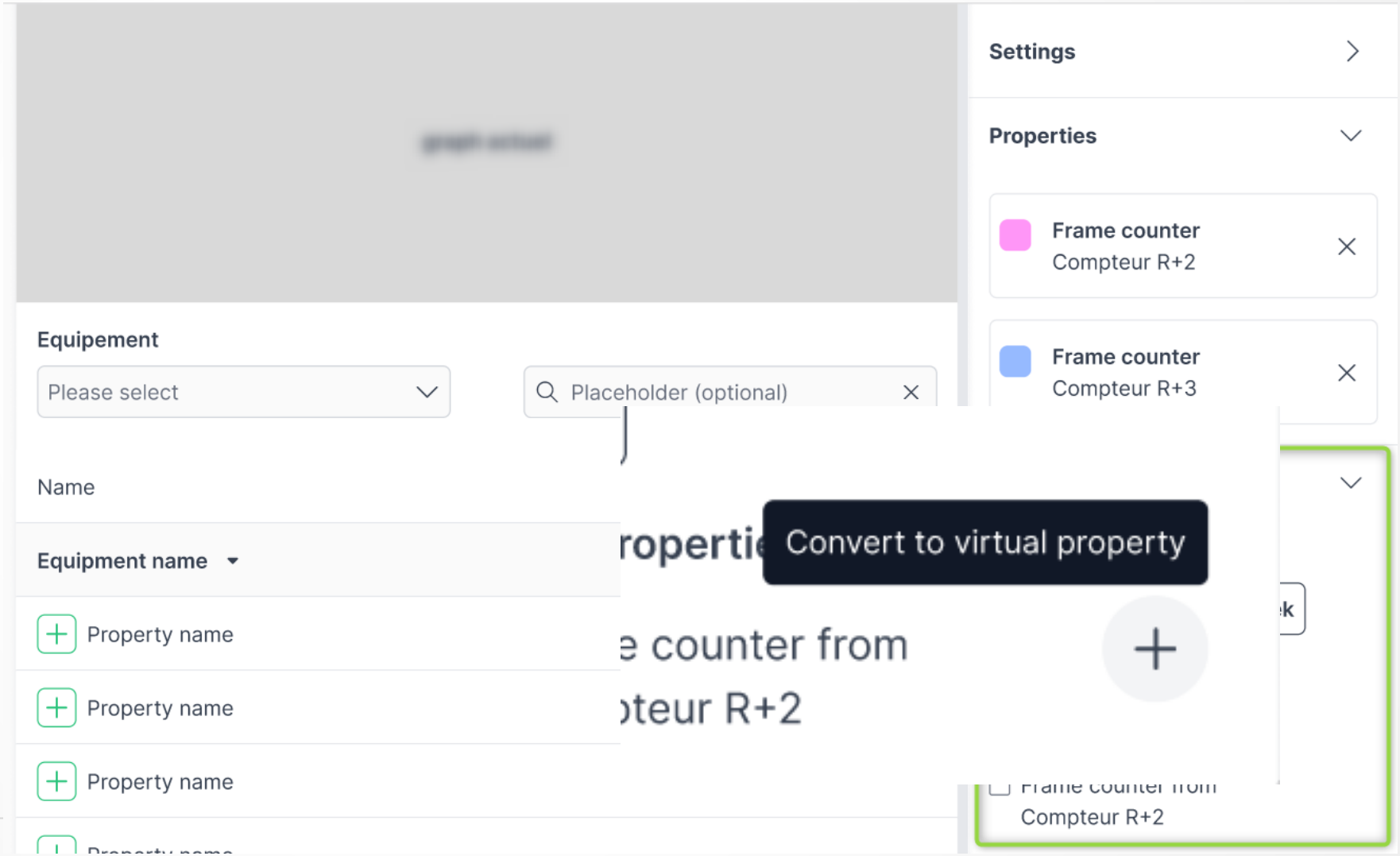
From a chart, see the differences instead of the consecutives values



Restricted use

2023 Q3 outlook – Zoom on virtual properties (Box/Tower only)

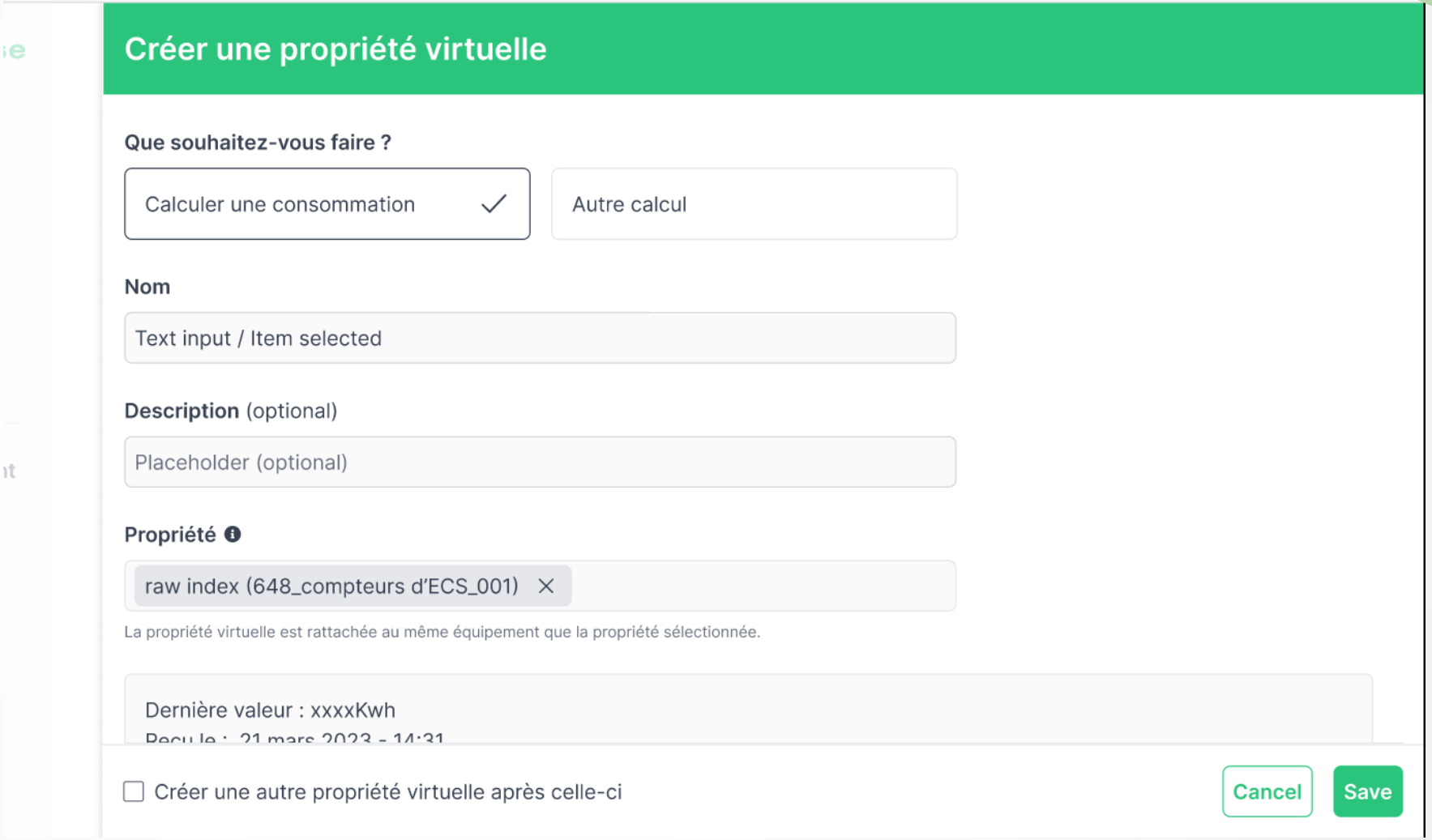
Convert it to a new virtual property
- to store the values
- to use it in alarms



Restricted use

2023 Q3 outlook – Zoom on virtual properties (Box/Tower only)

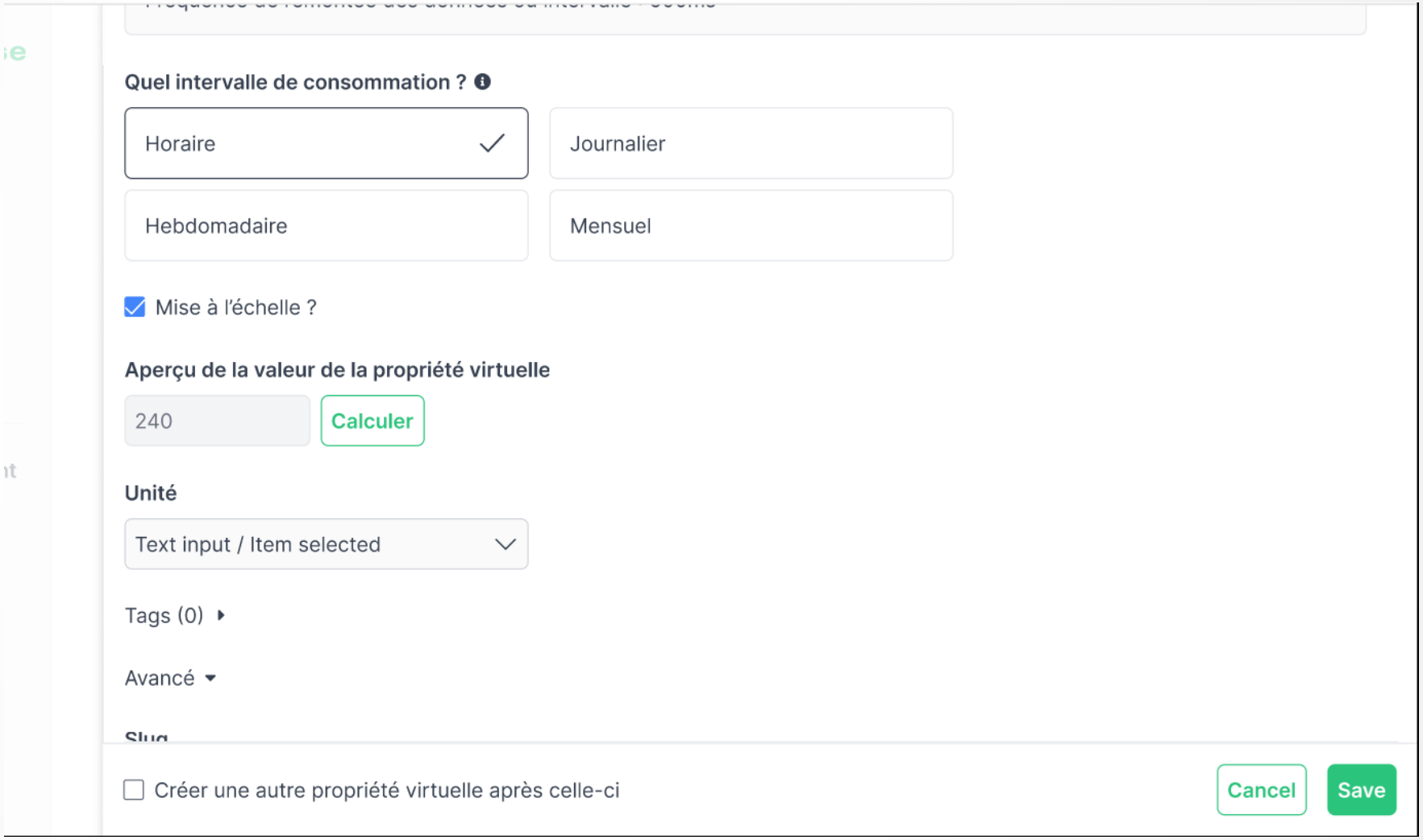
With this first version, virtual property are 100% dedicated to the calculation of consumption



Restricted use

2023 Q3 outlook – Zoom on virtual properties (Box/Tower only)

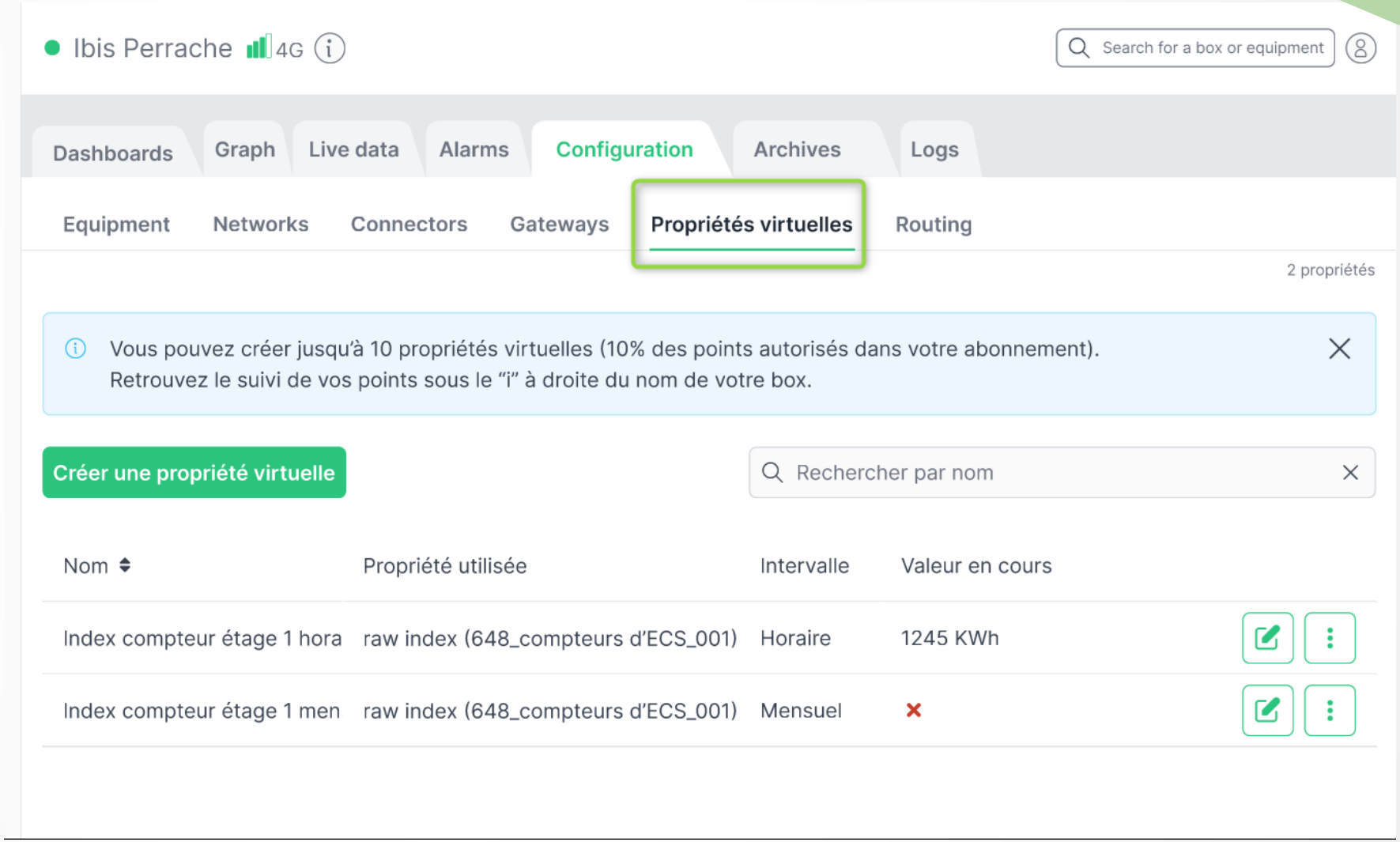
The interval to calculate the consumption is hourly, daily, weekly or monthly based.



Restricted use

2023 Q3 outlook – Zoom on virtual properties (Box/Tower only)

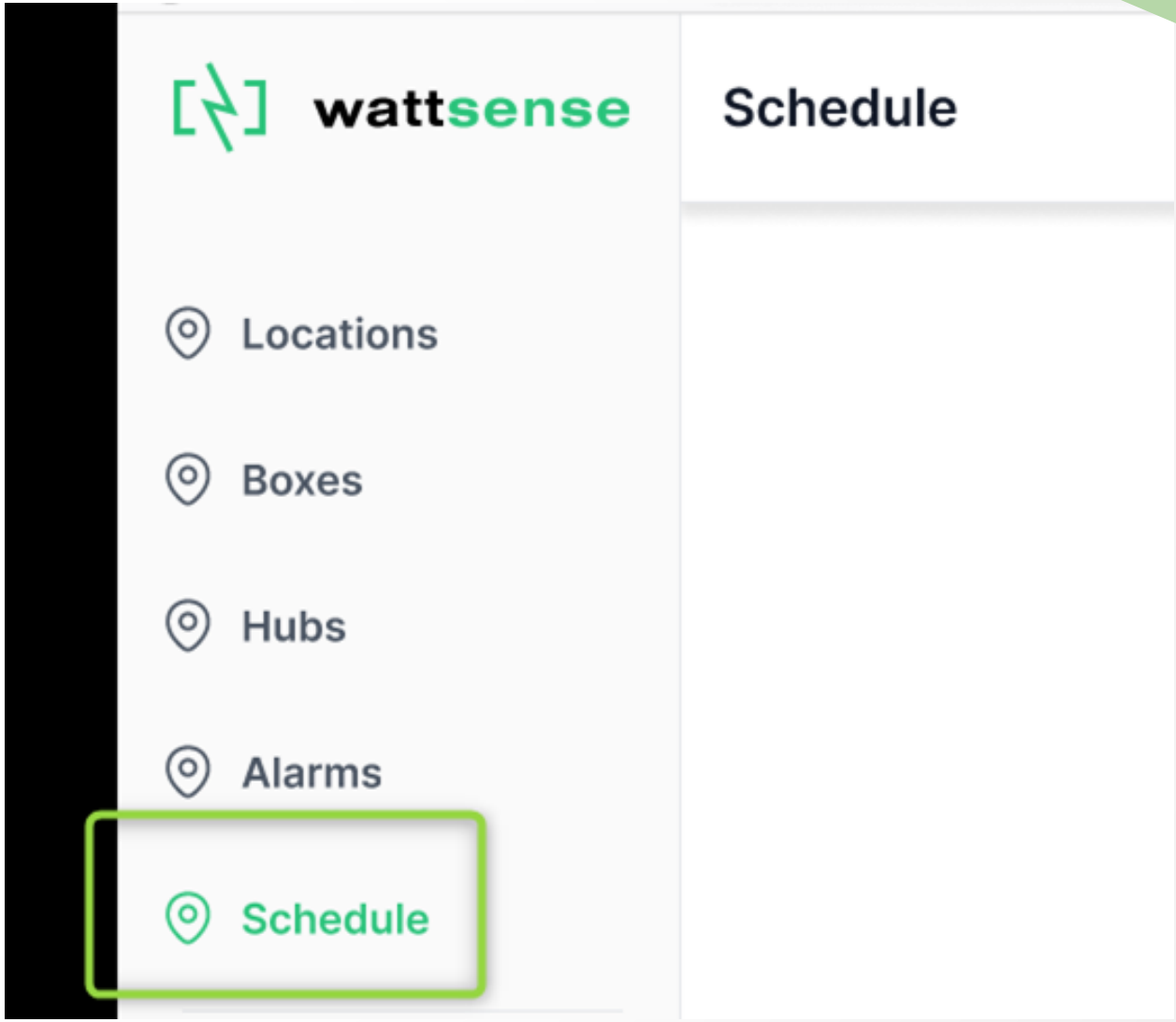
The number of virtual properties is limited to 10% of the total number of properties available in your subscription



Restricted use

2023 Q3 outlook – Zoom on weekly schedules (Box/Tower only)

New schedule main menu item for a cross boxes availability

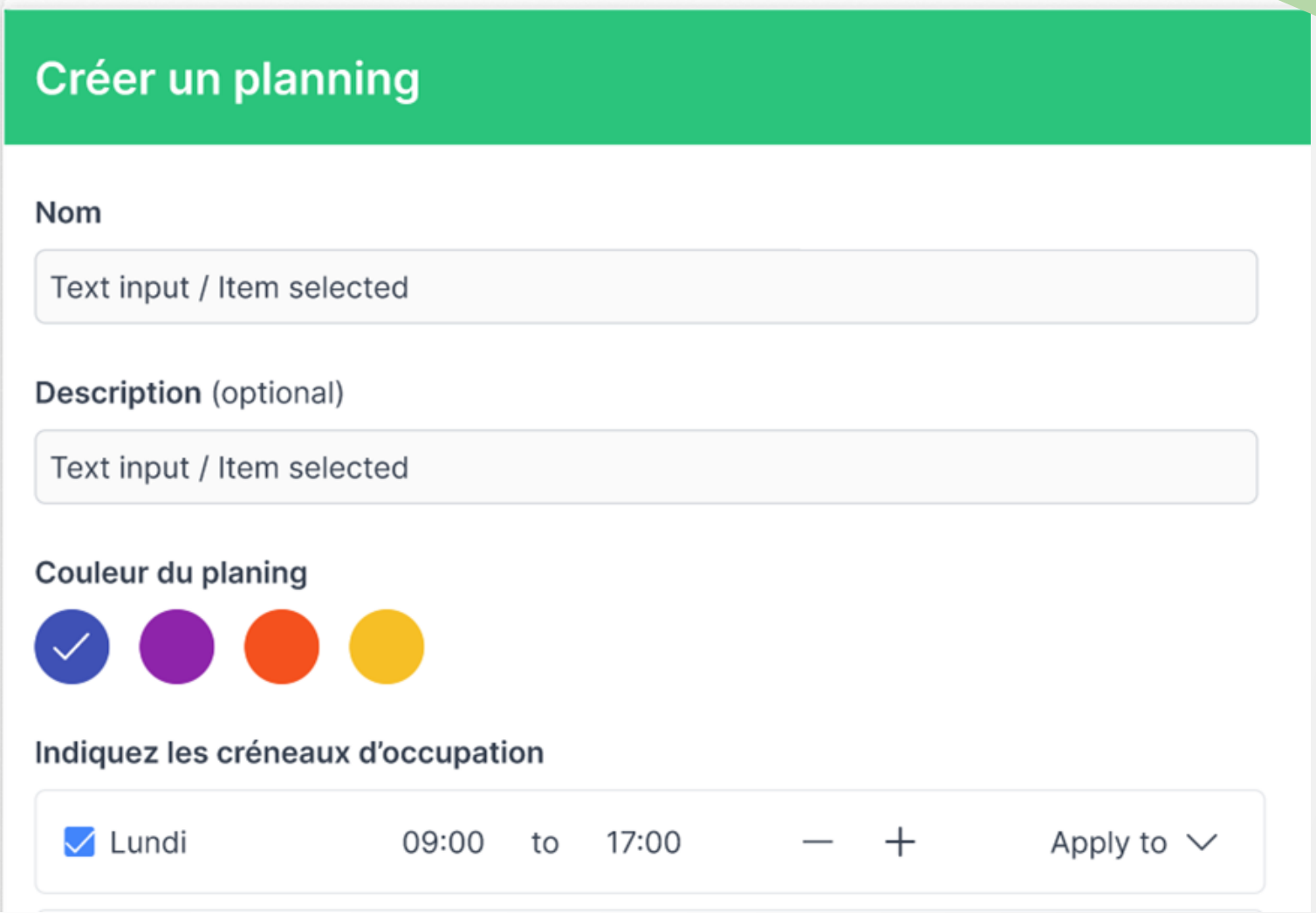


Testers wanted

Restricted use

2023 Q3 outlook – Zoom on weekly schedules (Box/Tower only)

Create a weekly schedule that will repeat itself and show when a building is occupied/unoccupied

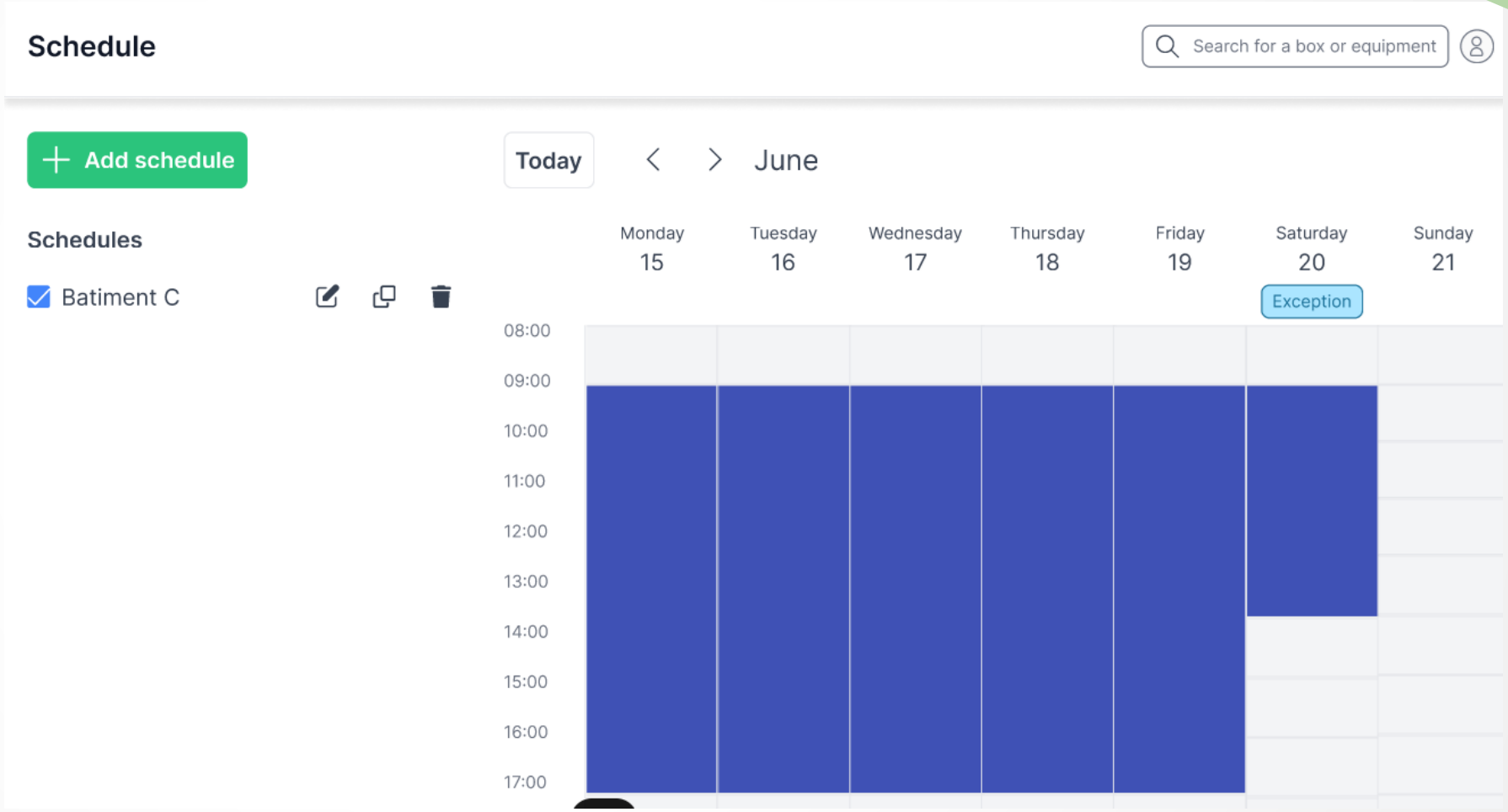


Testers wanted

Restricted use

2023 Q3 outlook – Zoom on weekly schedules (Box/Tower only)

Visualize the schedule

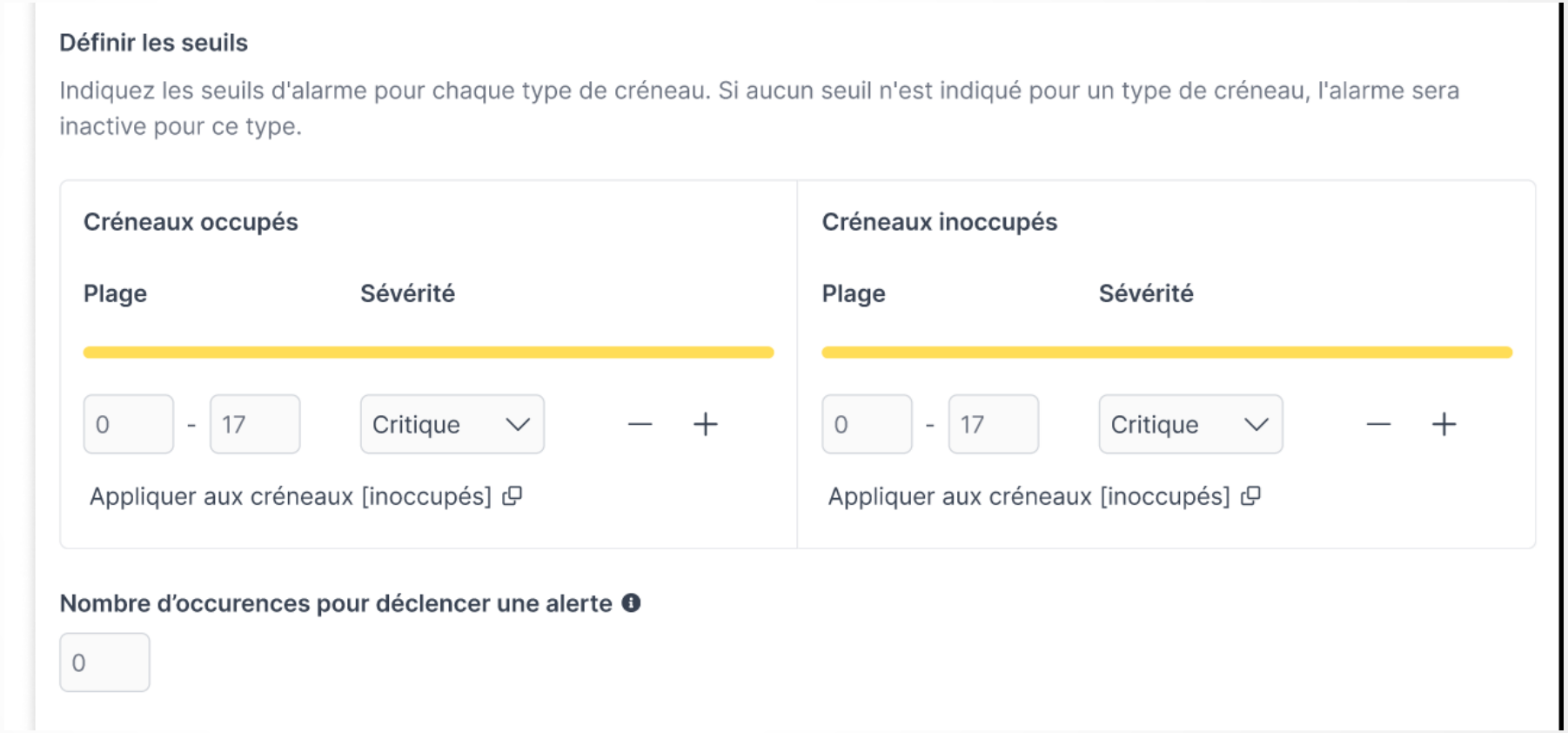


Testers wanted

Restricted use

2023 Q3 outlook – Zoom on weekly schedules (Box/Tower only)

Use the schedule in the configuration of an alarm to add new conditions



Testers wanted

Restricted use

2023 Q4 outlook

- Easy **automation**
- Update properties configuration in **bulk**
- **Order management** improvements (cross departments effort)
- Continue the roll out of **core features**

Thank you