How to add an intruder alarm to Paxton10

Overview

With Paxton10, it is easy to control and monitor the state of intruder alarms. A dedicated Paxton10 alarm connector can be installed and neatly fitted into the Paxton10 connector housing, or into the housing of your intruder alarm.

Connecting an intruder alarm to a Paxton10 system allows you to monitor and restrict who can arm and disarm the alarm. Your system will always know the state the alarm is in, making it possible to restrict access to your building when the alarm is armed, or to create custom rules which turn your lights off, close the windows or shut down equipment, saving energy while your building is unoccupied.

Creating the intruder alarm device

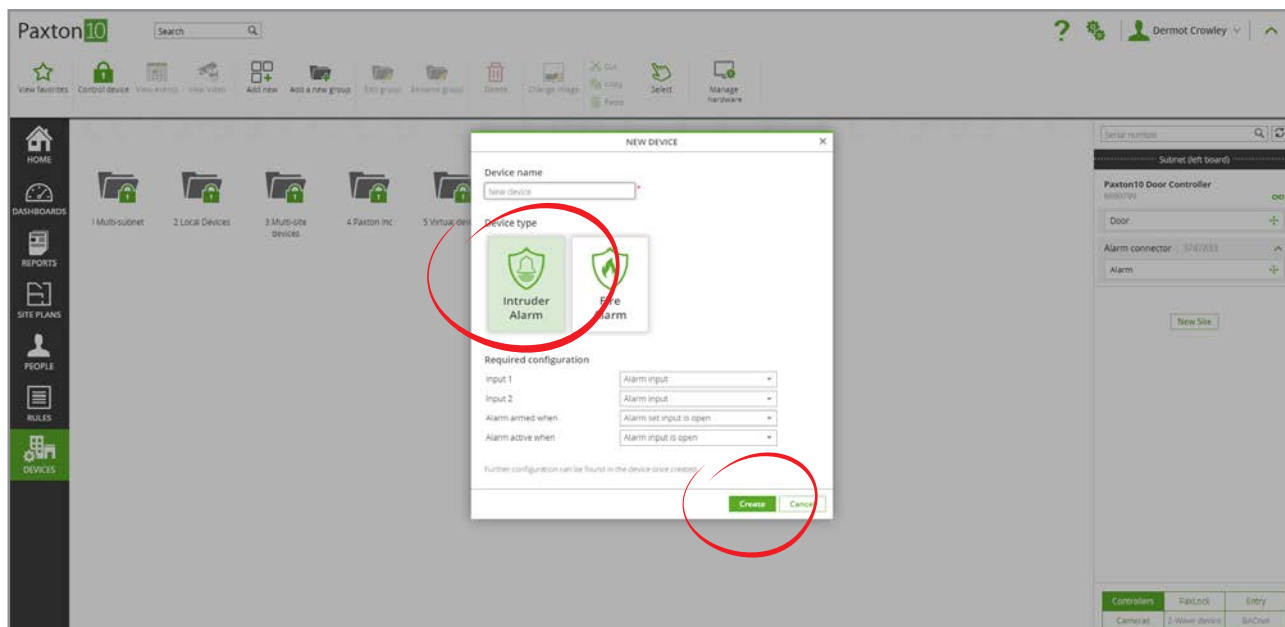Intruder alarms can be managed within the Devices section in Paxton10.

There are 2 methods for creating an intruder alarm in Paxton10:

Method 1 – Drag and drop

Before proceeding, ensure the Paxton10 hardware you're using to interface with the Intruder alarm is connected to the network.
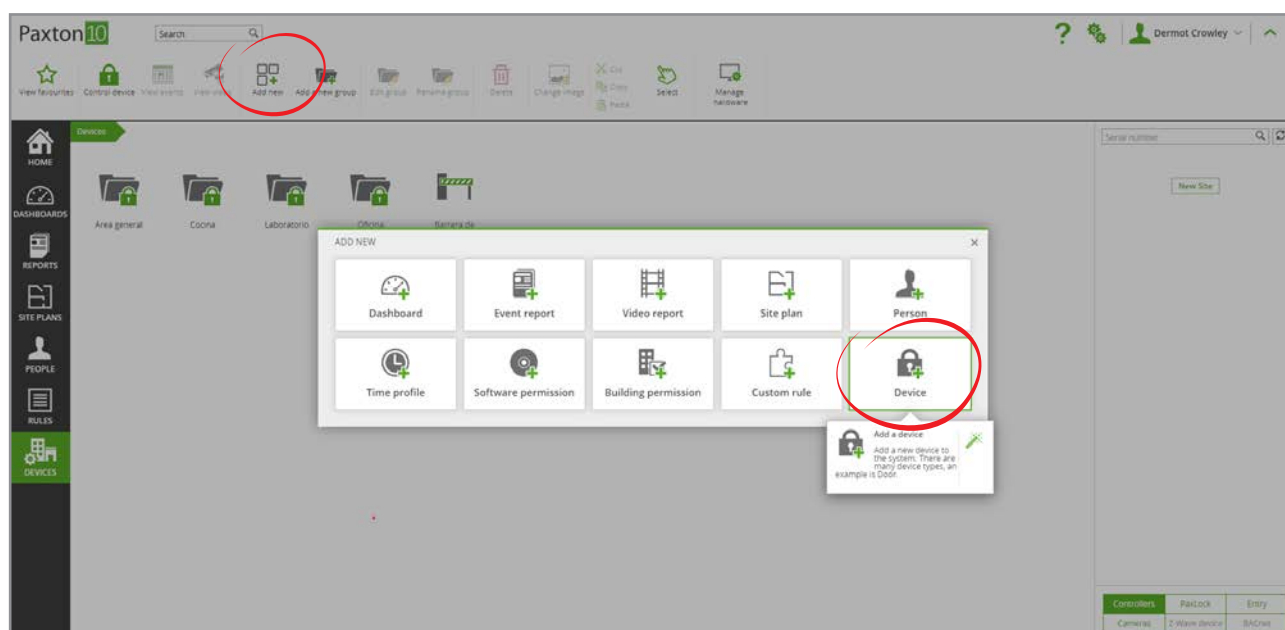
While in the '**Devices**' section:

1.   In the software, on the right-hand side of the screen, locate the hardware which is to interface with the intruder alarm (this could be a number of Inputs and Outputs from an I/O connector, or an 'Alarm' component of an Alarm connector)

2.   Click and drag the mappable component (Input, Output, or Alarm) onto an empty space on the left-hand side

3.   Select '**Intruder alarm**' as the Device type, and enter a name for it

4.   Select what the mapped peripheral(s) are connected to on the intruder alarm, and what state the inputs will be in when the alarm is armed and when the alarm is active (sounding)

5.   Click '**Create**' to finish creating the device

6.   Click and drag any additional components (Inputs or Outputs) from the right-hand side onto the newly created intruder alarm device to add all of the components necessary
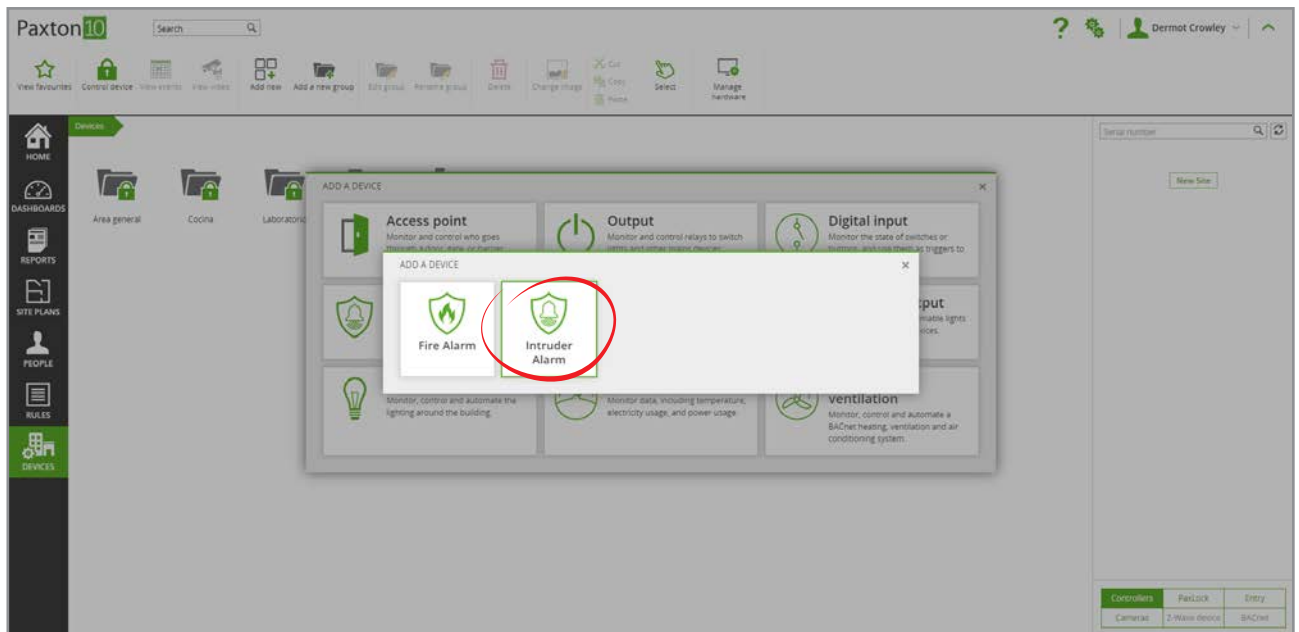
Method 2 – Add a device

While in the '**Devices**' section:

1.   Click '**Add a device**'

2.   Select '**Alarm**', and then click on '**Intruder Alarm**'
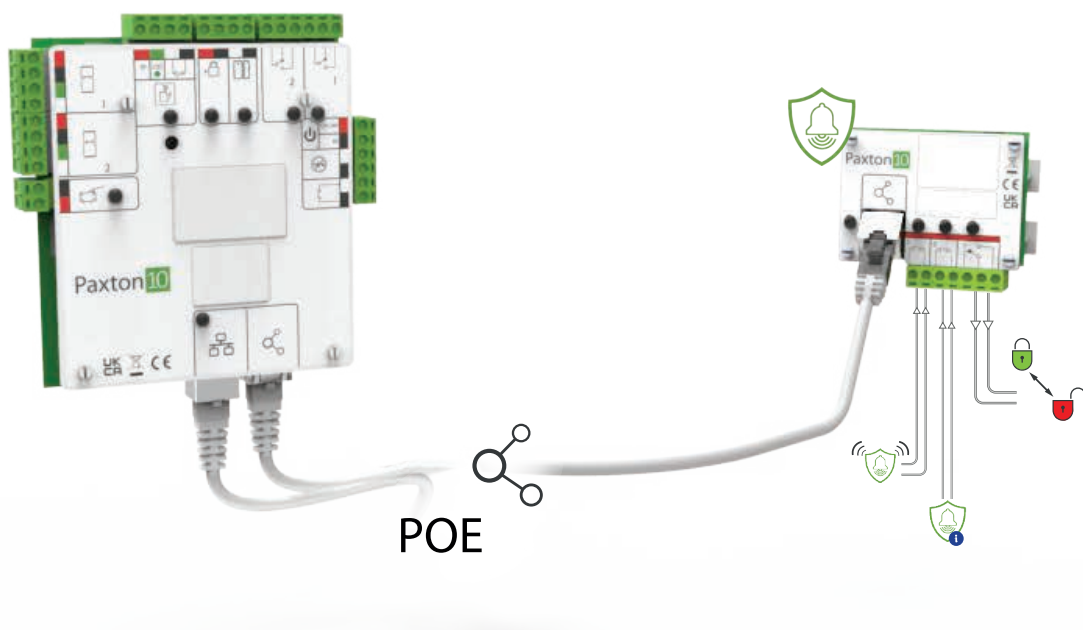
1.	Give the intruder alarm a name, and configure it as required

2.	Click 'Save'

To map the intruder alarm hardware to the Paxton10 intruder alarm device, return to the 'Devices' screen and locate the hardware on the right-hand side, then drag its components (Input, Output, or Alarm) onto your newly created intruder alarm device.

Connecting the intruder alarm to the alarm interface

Paxton10 interfaces with an intruder alarm using just 3 connections:

1.	To monitor when the alarm is active

2.	To monitor when the alarm is armed
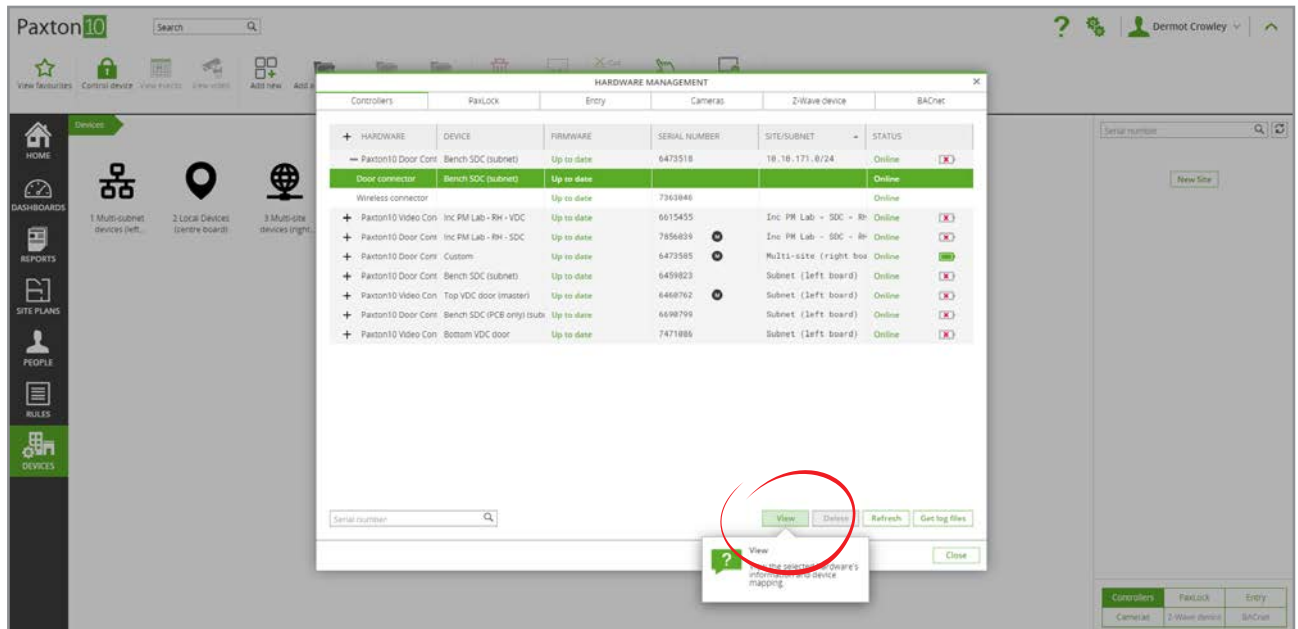
3.	For Paxton10 to arm the alarm
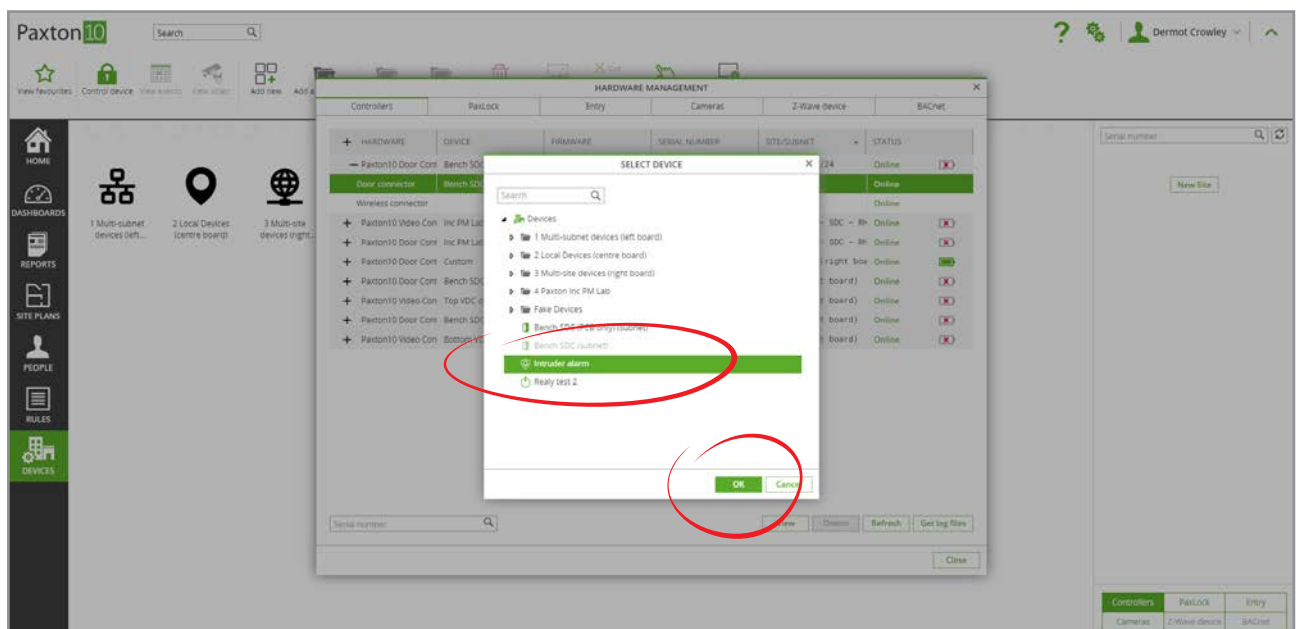

POE

Mapping a reader to the intruder alarm

It is possible to assign a dedicated reader to arm the intruder alarm.

While in the '**Devices**' section:

1. Select '**Manage hardware**' from the ribbon

2. Locate the Paxton10 controller which has the reader connected to it, select the '**Door**' component beneath it, then click '**View**'

3. Click '**Select**' next to the Reader port that your intruder alarm reader is connected to

4. Locate the intruder alarm in your list of devices, and then click '**OK'**

5.   The reader will now be mapped to your intruder alarm, and will appear in the '**Installation**' tab of the intruder alarm device
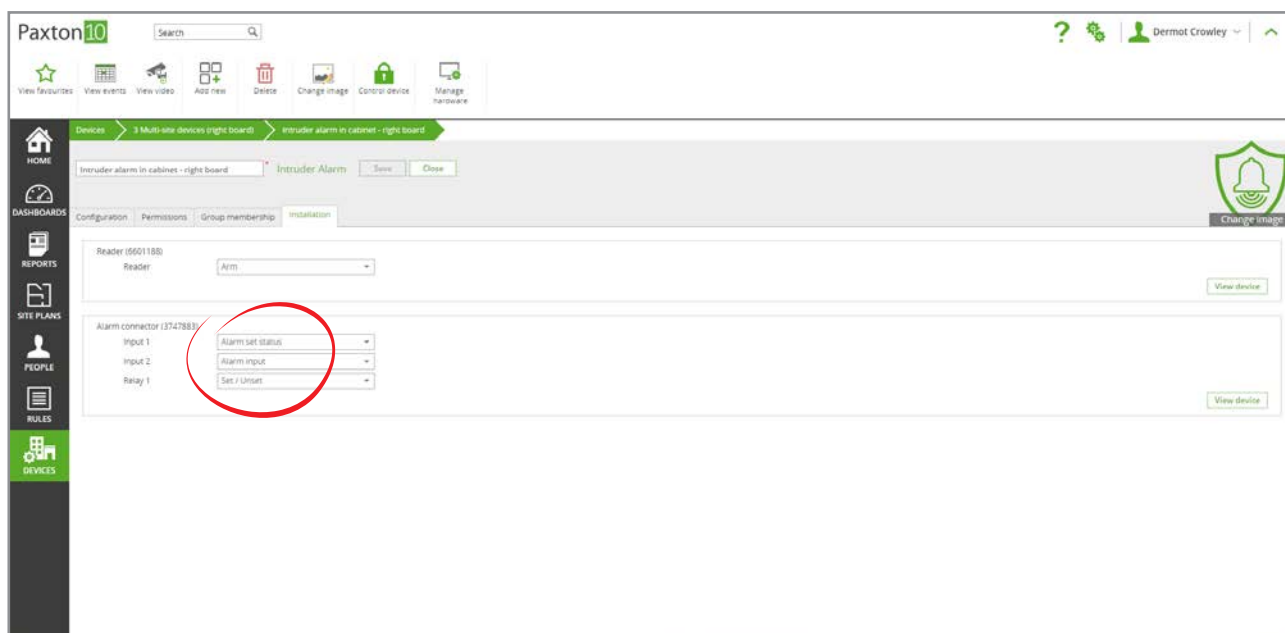
 Presenting a valid credential to a reader that is mapped to the intruder alarm will trigger Paxton10 to arm the intruder alarm. The reader LED will display '**Amber**' while the alarm is being armed, and will change to '**Red**' when the alarm is successfully armed. The LED will return to 'White' after 30 seconds.

Defining mappable component functionality

What each mappable component is connected to needs to be defined.

Select the '**Installation**' tab and configure each Input and Output to the relevant alarm function:

1.   In the dropdown next to the Input that monitors the alarm state, select '**Alarm input**'
2.   In the dropdown next to the Input that monitors if the alarm is armed, select '**Alarm set status**'
3.   In the dropdown next to the Output that alters the alarm state, select '**Set / Unset**'
4.   In the dropdown next to any readers you have connected to arm the alarm from, select '**Arm**'
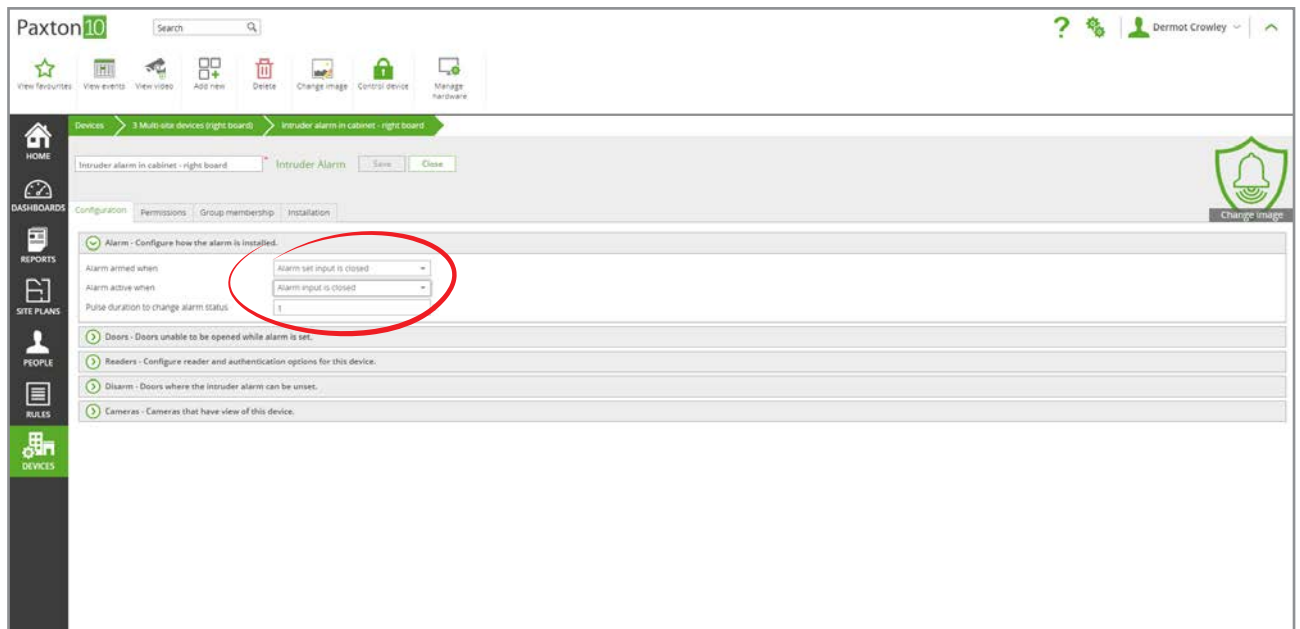

Configuring the intruder alarm

Configure how the intruder alarm operates, the doors that should restrict access when alarmed, where the alarm can be disarmed and whether it is in view of any cameras.

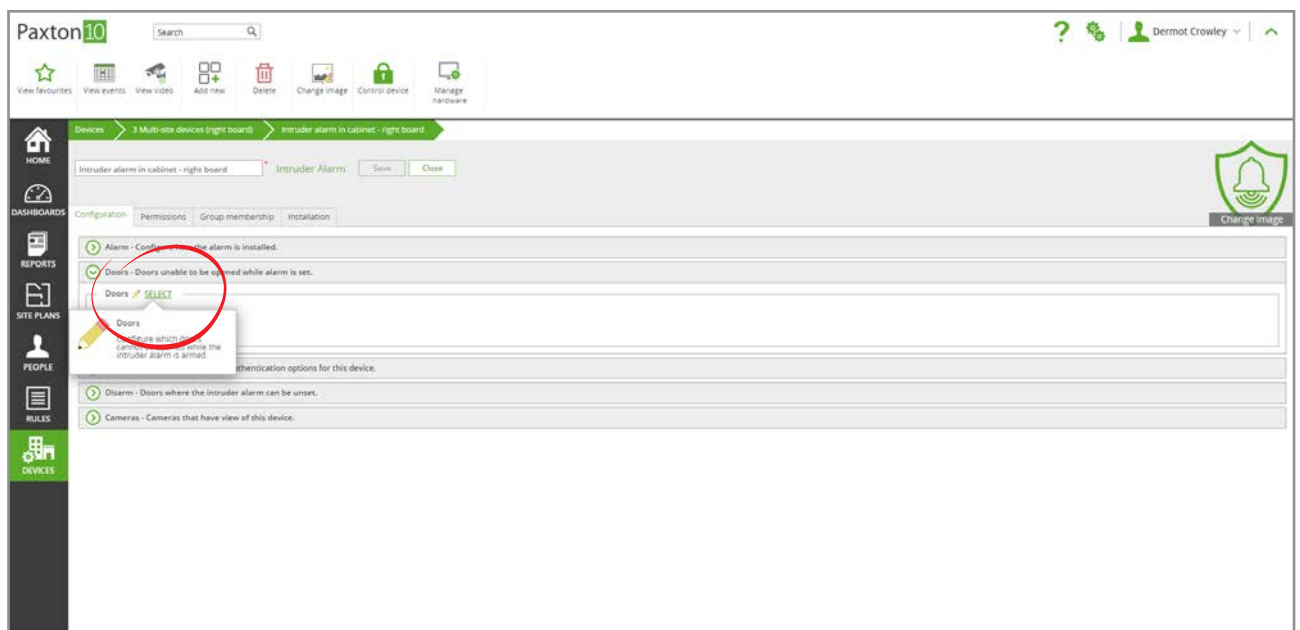In the Configuration tab, there are 5 sections:

Alarm

1.   Select if the '**Alarm set input**' is open or closed when the alarm is armed

2.   Select if the '**Alarm input**' is open or closed when the alarm is active

3.   Define the pulse duration required for Paxton10 to arm the alarm (1 second by default)

Doors

These are the access points that will deny access while the alarm is armed, restricting access to the area that the alarm covers.
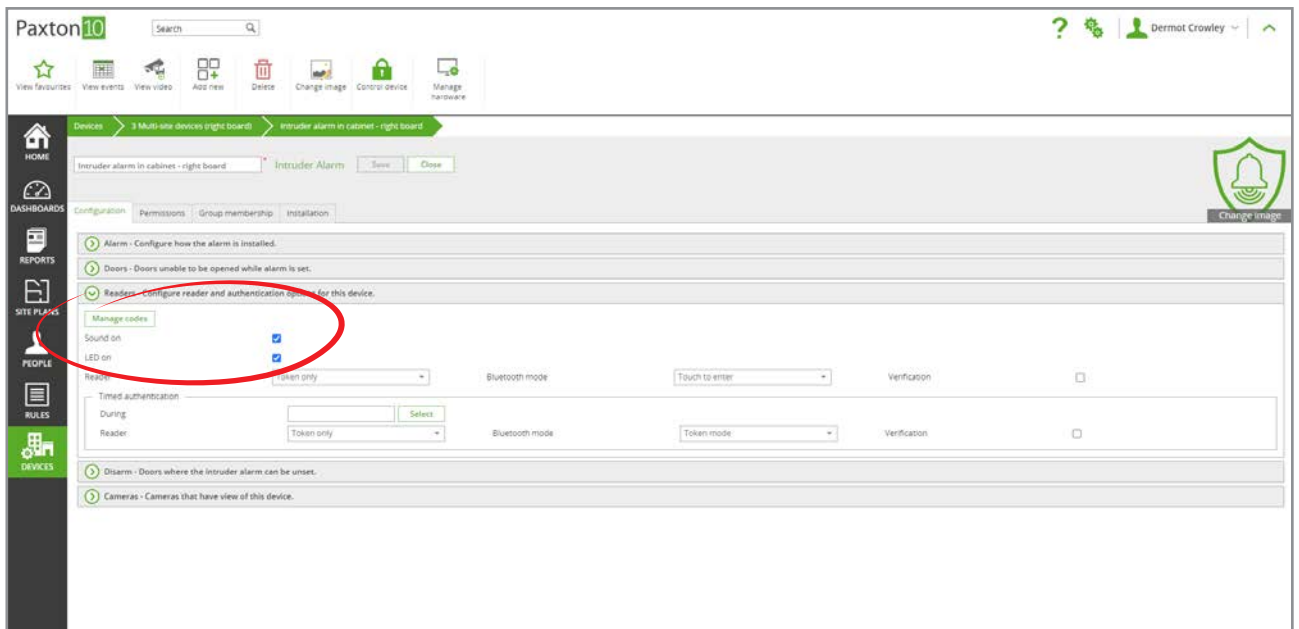
- Click 'Select' to edit this list

Readers

If using a reader to arm the intruder alarm, configure how the reader should operate.
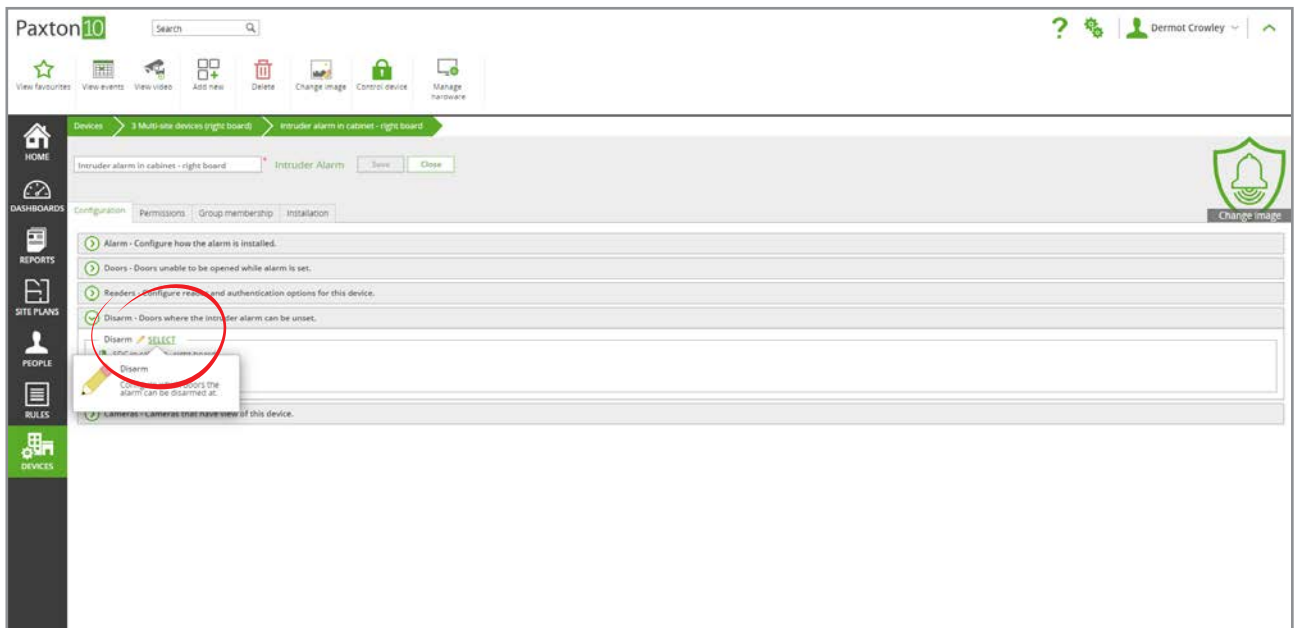
- 'Sound on' – When selected, the reader will provide audible feedback for valid and invalid access
- 'LED on' – When selected, the reader will show a white light at all times to help people locate the reader in low light conditions
- Configure authentication options to set the type of credential the user must provide (Token, PIN, Code), the read range of Bluetooth credentials, and whether Smart credentials (smartphones and tablets) require additional PIN or biometric verification

Disarm

These are the access points that the alarm can be disarmed at. Presenting a token that has permissions to disarm the alarm at any reader connected to these access points will attempt to disarm the alarm.
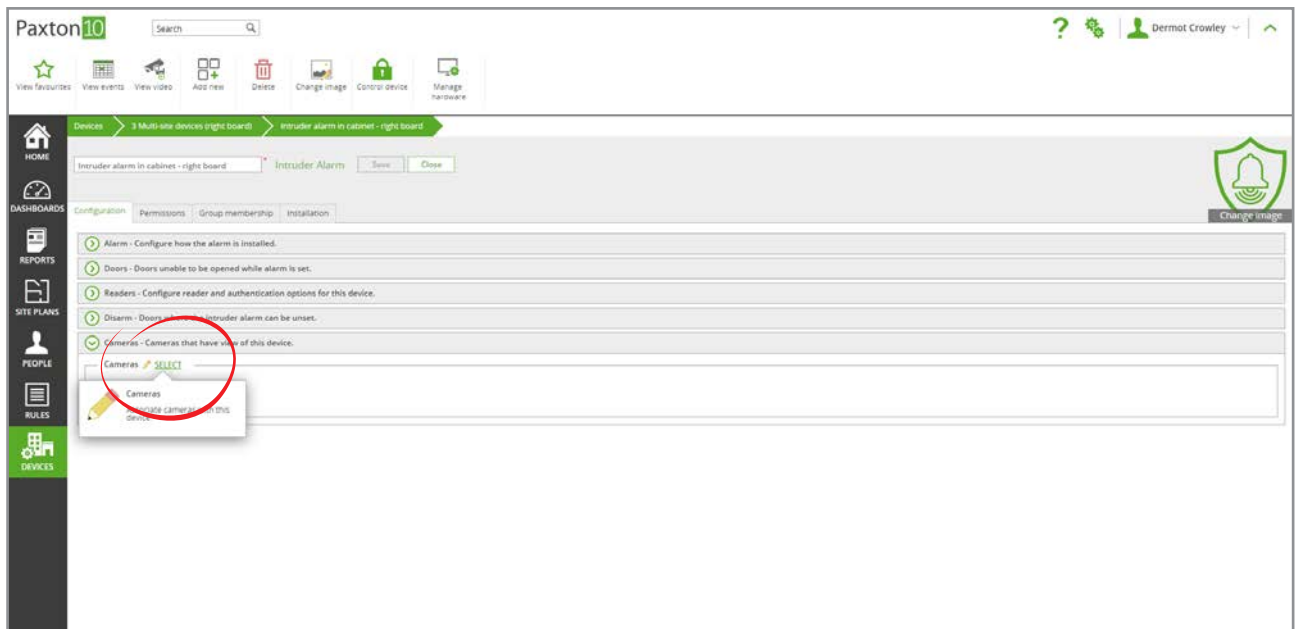
- Click 'Select' to edit this list

Cameras

These are the cameras that are associated with the alarm. Associating cameras with intruder alarms provide events with video footage.

- Click 'Select' to edit this list

Click 'Save' – You have now successfully created and configured the intruder alarm in the Paxton10 software. The alarm is now operational.

See AN0021 - How to create a Trigger and Action rule <paxton.info/4964> to learn how you could use the intruder alarm in custom rules to perform automated tasks when the alarm is armed, disarmed or activated, or for additional ways to arm and disarm the alarm.

Frequently Asked Questions

How do I arm and disarm the Intruder alarm?

Intruder alarms follow the same permission structure as other devices in Paxton10. Add the intruder alarm to a Building permission to determine which people are allowed to arm and disarm the alarm.

When an authorised user presents their token to a reader mapped to the device, the alarm will attempt to arm. On successfully arming the alarm, the LED on the reader will illuminate Red for 30 seconds.

To disarm the alarm, simply present an authorised token at any of the disarm access points. The alarm will disarm and the reader will illuminate Green. The access point will return to its usual operation.

I don't have a spare reader port, how can I arm the alarm?

In the case that all reader ports on your door controllers are being used, or you simply want an alternative method of arming your alarm, this can be achieved as a Triggers and Actions rule. See AN0021 - How to create a Trigger and Action rule <paxton.info/4964>

Can users still access the building while the alarm is armed?

With Paxton10, it is possible to restrict access to the entire, or parts of, the building. Add access points that allow access to the building or area to the Disarm list of the intruder alarm. While the alarm is armed, unauthorised users are refused entry, doors will not unlock on time profiles and doors will not be actionable via the software.

Once an authorised user presents their token to one of these access points, the alarm will disarm, and doors will resume their usual operation.

Can I have multiple intruder alarms?

Yes, there is no restriction to the number of intruder alarms you can have in Paxton10. Simply create multiple intruder alarm devices, following the steps above. Intruder alarms can share disarm access points, however they must each have their own arm reader.