Pick and Pay Point of Sale Integration, Standard Setup Procedures

Contents[1]

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1 Introduction

This document is meant to get you up and running using the **standard** Pick 'n Pay integration settings. It will take you, in a step-by-step fashion through the settings that are standardly applied in a Pick 'n Pay setup.

This should have come bundled with the main setup manual for CatVision, please make sure that you are familiar with concepts such as Events, Databases, Schedules, and Cameras (All of which you will find in the main manual).

- *Concepts*

The core concepts of the CatVision integration process are **Devices** and **Objects.**

In an integration you will have a Device, with a number of Objects attached to it. To use an alarm panel as an example:

Alarm Panel	Device
Alarm sensors/zones	**Objects**

2 Setup

a. Introduction

There are two distinct areas of setup when it comes to the Pick 'n Pay (PnP) Point of Sale (POS) integration. These are the network (non-CatVision) setups, and the CatVision based setups.

b. Network Setup

Network Cards

You will need to have two network interfaces on the server that you are attaching the POS to:
1. An interface that connects to the POS network
2. An interface that connects to the camera (Security System) network.

Firewall

Either disable the firewall on the server, or open the relevant port (this is port 4050).

Contact PnP for specific network instructions

This step is a vital one. You will need to:
1. Request a switch port number from the central network administrators at PnP. **This is a physical port on a switch.**
2. Confirm with PnP that the port that you have been assigned is **on the same Virtual LAN as the till** that you are connecting.
3. Get an IP address for the NVR. (This IP address will always end in the number 100.)

Network Time Protocol (NTP) Setup

NTP will synchronise your unit's time with a central server. The NTP address will be identical to the NVR's IP address, except for the last 3 digits, which will be 125, e.g.:

NVR address	10.130.114.100
NTP	10.130.114.125

Note: Time sync between the NVR units and POS server is vital. This ensures that the correct video footage gets associated with received POS transactions.

Refer to Windows NTP configuration to synchronize the NVR time with that of the PnP NTP server.

c. CatVision Setup

Licenses

There are four license types that apply to the NVR on which the POS integration will be configured.

Code	Description	Features
CPOS-2000	POS device license	FEATURE_CATVISION_POS
CPOS-1001	POS single Till license	FEATURE_CATVISION_POS_TILL
CPOS-1010	POS 10 till license	FEATURE_CATVISION_POS_TILL x 10
CPOS-2100	POS device bundle license (unlimited tills)	FEATURE_CATVISION_POS, FEATURE_CATVISION_POS_TILL_UNLIMITED

- *Special Note on Licencing*

The licenses need to be applied **to the server the integration device will be configured on**.
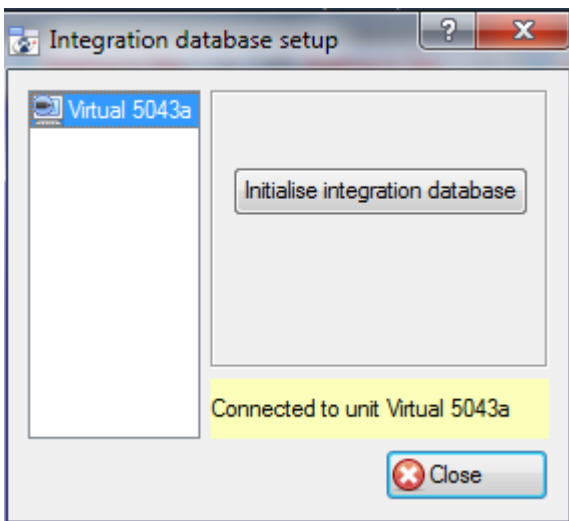
Integration Database Management

The integration database is a dedicated PostgreSQL database where PnP POS transactions are saved. The video footage is saved to the NVR database.

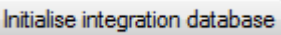Integration Database Management is accessible via two paths:

1. Via the Site Menu. **Site—>Integration Database…**
2. From the General Tab in the Integration Panel (**Site —> Open Tab —> Setup —> Configure Servers —>** Integration devices).

- *Initialise the Integration Database*

This will add a broad database, to which you add all of your integrated devices' databases.

The first time you add an integration database you will have to initialise this feature on the server.

Select the server you wish to add the database to, from the list on the left, and click Initialise integration database . You have to choose which partition the database will be formed on, and select how much space it will take up.

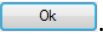| Partition | C:\ (C:\) |
| Total space available | 8134 MB |
| Disk space allocated to integration database | 1000MB |

- *Add a New PnP Database*

Right click on the white space that was occupied by Initialise integration database before you initialised your database, and click on New .
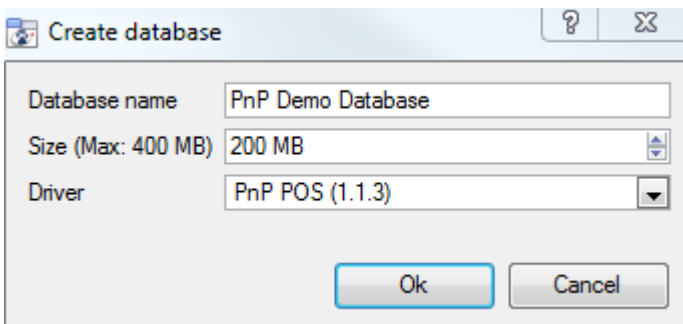
Give your database a descriptive **Database Name**.

Allocate a **Size** to your new device database.

Then choose the PnP device **Driver** that your device will be using, and click Ok .

Note: The size of the database may seem small, but keep in mind that only text transactions are saved here.

- *Integration Database Procedures*

Once you have added your database you will see the following procedures, if you right click on a database:
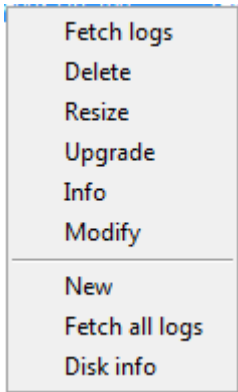
Fetch Logs will fetch the logs for the database you have right-clicked on.
Delete will delete the database you have selected.
Resize allows you to resize this database. You will have Min and Max options, which will either fill the database to the maximum, or the smallest, sizes allowed.
Upgrade upgrades the metadata base.
Info will give you a full list of all available information on the database.
Modify will simply allow you to rename the Database.

New will open the New Database Dialogue.
Fetch All Logs will pull a consolidated log for all integrations databases on this unit.
Disk Info will provide detailed information about the hard drive the database is on, as well as the Databases on it.

Add a New Device

Once you have added your device's database you can add the device to a specific server on the site. Because a Device is added to a server, the adding/editing takes place in the Setup Tab, under Configure Servers.
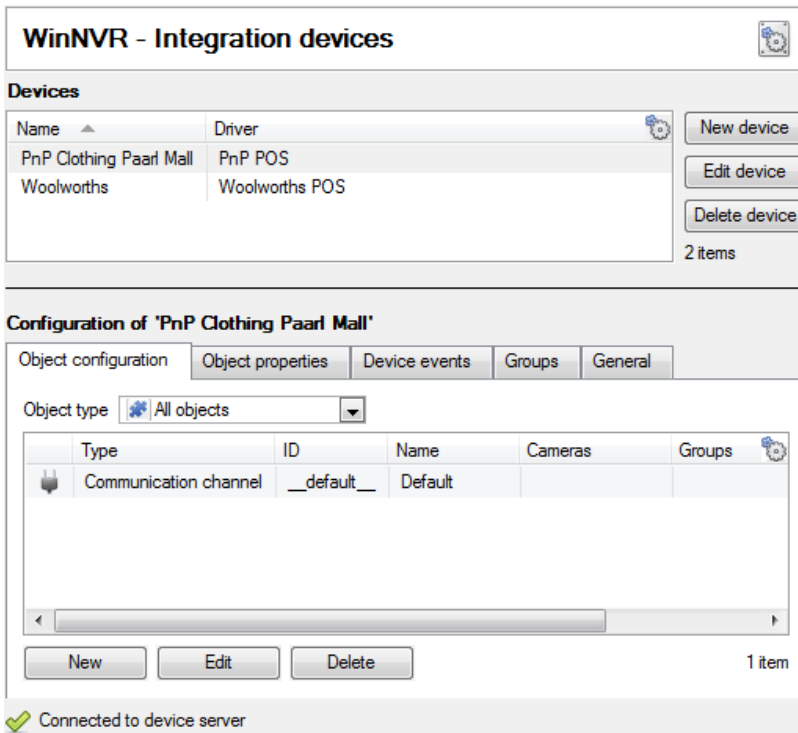
- *Enter Configure Servers*

Once in Configure Servers expand the server that you are going to add the PnP POS device to, by clicking on the ⊞ next to its name.

- *Open the Integration Devices Panel*

The Integration devices panel is the central point from which you manage all integrations. Top open this panel, select ⚙ Integration devices from the server's options.

Since integrations in CatVision are divided into two areas **devices** and **objects**, the Integration Devices panel is divided into two sections:

1. The **Devices** section is a list of all devices that have been added to this unit.
2. The **Object Configuration** section is where you edit the device that you have selected in the Devices section.

You select a Device from the Devices list, and then you may edit the objects attached to that list in the Object Configuration Section Below.

- *Add the PnP device*
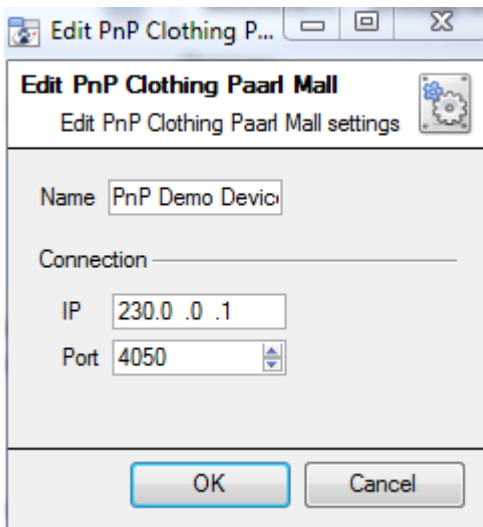
Click on [New device]. This will bring up an alphabetical list of all the available integration drivers. Select the PnP POS driver, and click [Next >].

Give the device a **name** that is specific to the Pick 'n Pay that it is installed in.

Leave the settings under **connection** as they are.

Click OK to finish the addition process.

Note: You only need to add this device to one server on the site.

Configuration

Once you have added your device you will need to configure the Objects (tills) that are attached to it. If you are online, the tills will appear in the Objects list as they perform transactions. The Configuration section will be automatically populated with the information received from the device.

- *Object Configuration Tab (Associate Cameras and Access Rights)*

On a Point of Sale integration the objects are the tills.

Note: Objects can have cameras assigned to them, so that camera recordings can be linked to the till via a meta-database.

Associating cameras is very important for two reasons:

1. **Event based setup.** When creating Integration triggered Events, you may have "Record Trigger Cameras" as an event action. This will record the cameras associated with specific tills, if they trigger an event.
2. **Continuous recording based setup,** where the integration creates timestamps. These timestamps identify recordings with transactions. If you have not associated a till with a camera *there will be no recordings attached to transactions*.

Note: For more information on this see section d. Introduction

The information provided in this section focuses on areas where the PnP POS integration deviates from regular the regular Events setup, as described in the main manual.

Please be familiar with CatVision Events, as per the description in the main setup manual, including the section on Integrated Devices, before following the instructions in this section.

Important Considerations, below.

Associate a Camera with an Object

Double click on one of the tills in the list, this will bring up the till edition window.

Too add a camera click on the Add Camera button. This will bring up a camera in the list. Choose which of the site's cameras you want from the drop-down menu.

Note:

- You may associate multiple cameras with each till.
- Provide a unique name to every camera on the site. If you have multiple cameras with the same name, only one of those cameras will show up on this list.

Access levels

In the access levels tab you may

Set the access, levels for individual Tills, by selecting the till and setting the level.
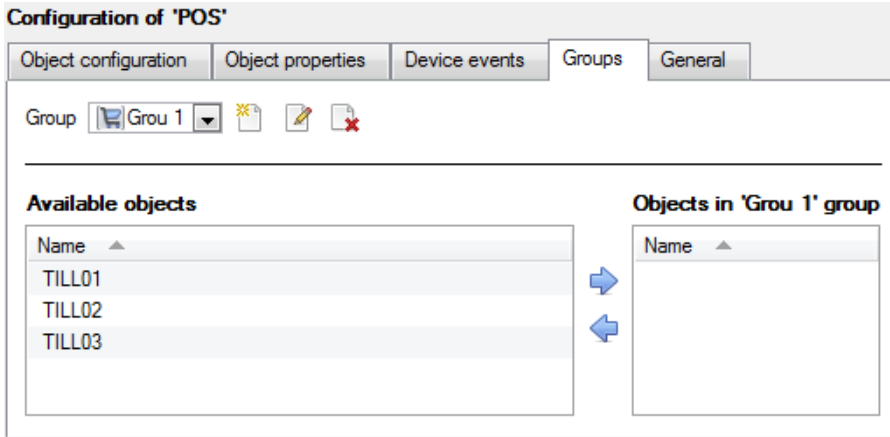
Or set a default access level for the Till Object type, by clicking on the **configure default access** button.

Note: this relates to the access rights you assign to the users on this system.

- *Device Events Tab*

This gives a live stream of all device events as they occur. For POS this is transactions.

- *Groups Tab*

You can create groups of the same type of object. When creating a group you will select what object type you want to group. Once the group is created the available objects panel will fill.

Groups are used in the Events setup. You may have an event trigger based on a group's activity.
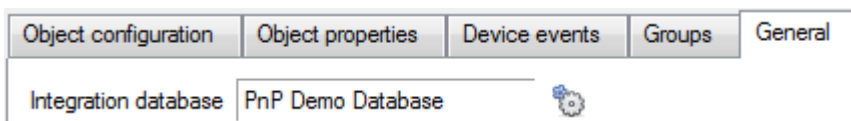
Create/Edit a Group
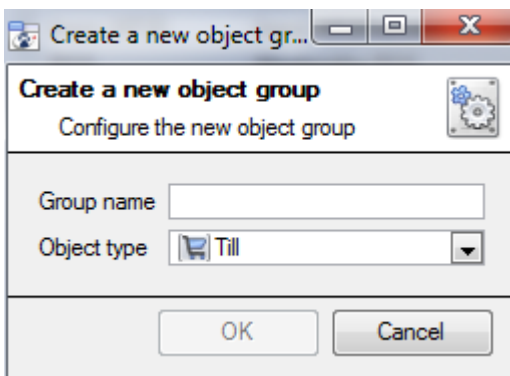
To create, edit, or delete a group a group click on ⬚, ✏, or ✖ respectivley.

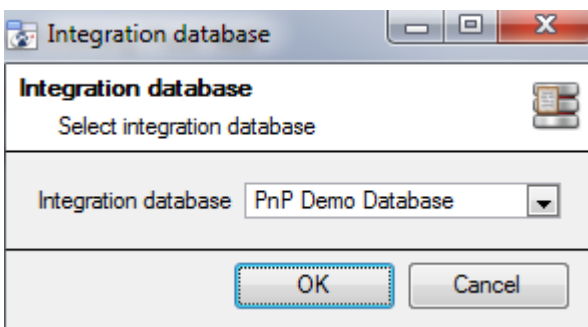Give your group a descriptive **Group Name**.

Select the **Object Type** that you want to populate your group with.

Note: groups are used as triggers in Events.

- *General Tab (assign the device to an integration database)*

An important step is to assign this device to one of the Site's Integration databases that you created.

To do this, navigate to the General tab under your Device, and click on the ⚙ icon, which will bring up the dialogue you see to the left.

Select the relevant database from the dropdown menu, and click OK.

The devices data will now be recorded in the correct database.

3 Events

a. Introduction

The information provided in this section focuses on areas where the PnP POS integration deviates from regular the regular Events setup, as described in the main manual.

Please be familiar with CatVision Events, as per the description in the main setup manual, including the section on Integrated Devices, before following the instructions in this section.

b. Important Considerations

Consider these when adding an integrated device.

Device Triggered Recordings VS. Continuous Recording with Device Provided Markers

One of the first things to take into consideration when using an integrated device is how you want it to interact with your Surveillance System.
- Do you want the device itself to trigger recordings? Or,
- Do you want continuous recording with the integration creating time markers on this recording?

There are pros and cons to both, which the mind-map below provides:
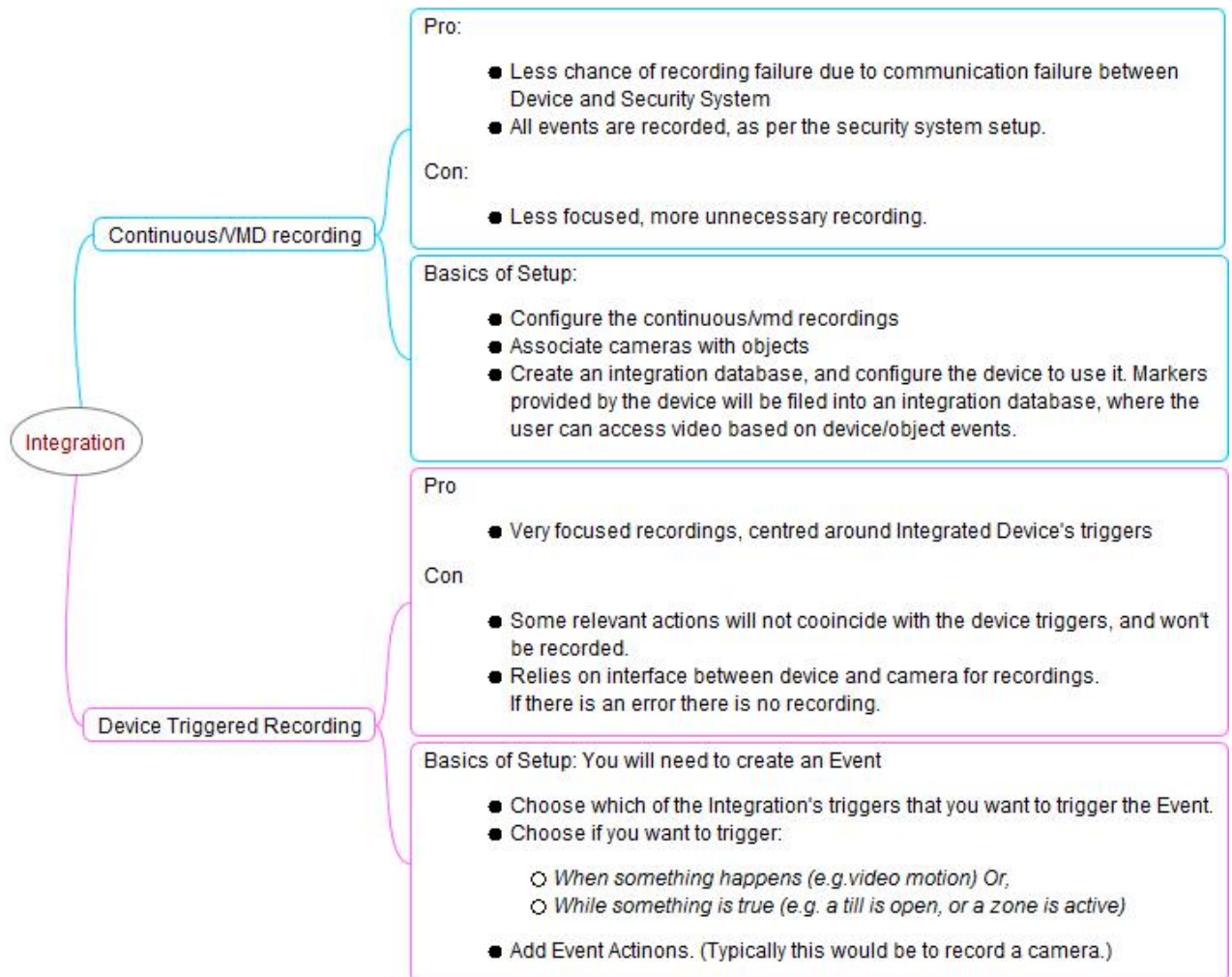
c. Setup Integration Triggered Event

Introduction

The standard setup for a PnP system is to have two events related to the each till:

Event Type	How it is treated in this manual
1. An event that triggers on motion	Refer to the main setup manual for Video Motion Setups, and events.
2. An Integration Triggered Event that triggers when the Till is in a transaction.	This will be dealt with in the current section.

- ### *Open the Events Setup Panel*

To access the Events setup panel you follow this path: **Site Menu—>Open Tab—>Setup—> —>Select the Server the Integration has been added on—> Events**

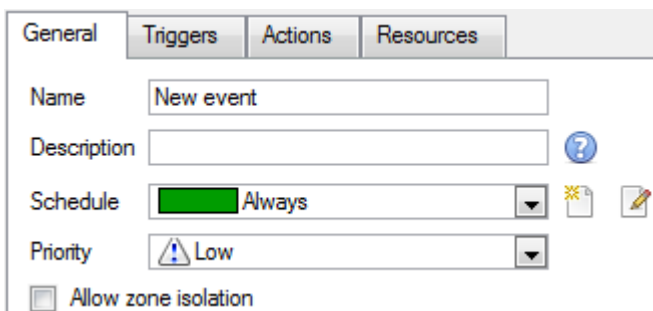- ### *Create/Edit an Event*

To create a new Event: In the Events panel, click on New.
To edit an existing Event: select an Event, and click on Edit.

General Tab

- ### *Description*

The **Description** is the name given to the event when it is databased/sent as an alarm. If this field is left empty, the Event Name is used. Clicking on the will give you a list of available description variables. When an event triggers off inputs from an integrated device, fill in this field. But only do so, **after** you have selected a trigger type in the Triggers Tab.

Note:
1. The options that you have available here will change, depending on the triggers that you choose in the Triggers Tab, so set this parameter **after** you set your triggers.
2. The format for adding the variable is: `Descriptive_Name:$Variable_Name`
3. You may add multiple variables.

- ### *Enter the Description*

Enter the following text into the Description field:
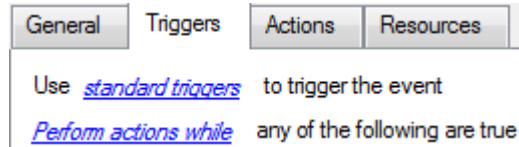`$obj_in_transaction $obj_till_id`

Trigger Tab

The following settings are the standard PnP settings for an event that is triggered by a transaction.
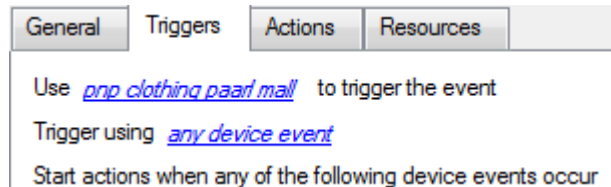
- ## *Select the relevant device*

When you create a new event the triggers tab will look like the image to the right.
You are using an integration trigger so click on the hyperlinked text saying, "standard triggers", and select your POS device from the drop-down menu.

General	Triggers	Actions	Resources

Use *standard triggers* to trigger the event

Perform actions while any of the following are true
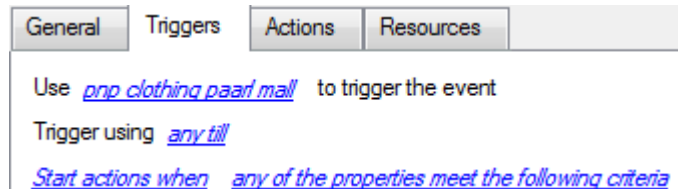
- ## *Select the "any till" trigger*

The default trigger will be set to *any device event*. You will need to click on this hyperlinked text, and select ⛟ any till from the drop-down menu.

General	Triggers	Actions	Resources

Use *pnp clothing paarl mall* to trigger the event

Trigger using *any device event*

Start actions when any of the following device events occur

- ## *Change to Perform Actions While*

After selecting "any till", the interface should now look as it does to the right.
You need to change the "Start action" setting. Click on *Start actions when* and select Perform actions while from the drop-down menu.

General	Triggers	Actions	Resources

Use *pnp clothing paarl mall* to trigger the event

Trigger using *any till*

Start actions when *any of the properties meet the following criteria*
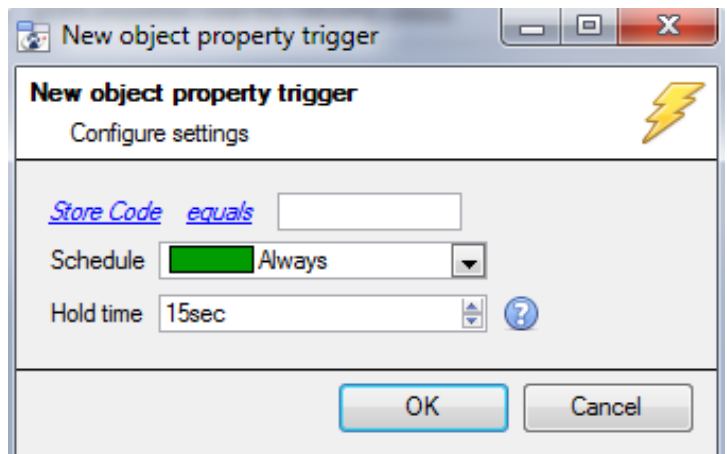
- ## *Add a Trigger*

You are now ready to add your trigger
Click on NEW. This will bring up the dialogue you see to the right.

Changer Trigger to "In Transaction"
1. Click on *Store Code* and select In transaction from the drop-down menu.

   The correct setup should look like this:
   In transaction *equals* true ▼ .

2. Put the **Schedule** on Always.
3. Set the H**old Time** to 20 seconds.

New object property trigger

New object property trigger
Configure settings

Store Code *equals* [   ]

Schedule [🟩 Always ▼]

Hold time [15sec ▲▼] ❓

[OK] [Cancel]

Actions Tab

- ## *Select Record Trigger Cameras*

Once you have added your trigger you must proceed to the Actions Tab. If you have associated cameras to Till objects in the Integration Window, then you may use the Record Trigger Cameras option.

Click on [New] to add a new action, and select 📹 Record trigger cameras... from the drop-down menu.

- *Record Trigger Cameras Setup*

Recording Channel is the default channel that will be recorded from the camera. (Make sure that all selected trigger cameras have the same channel set for recording.)

GOP Frame-rate is the frame rate to record GOP based video compression streams. (E.g. MPEG4 or H.264.)

JPEG frame-rate is the frame rate to record single frame based compression streams. (E.g. MJPEG.)

Pre-events are the amount of seconds of footage that are recorded from before the event was triggered.

Database is the database the cameras will record to.

Note: Although you can associate cameras to Objects (tills) from across the whole site, the cameras still have to record to the server they are added on.

So select the relevant database for Integration Triggered recordings, on each server.