How to configure Fire & Smoke Detection in FireFly 3.1

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inteleXvision
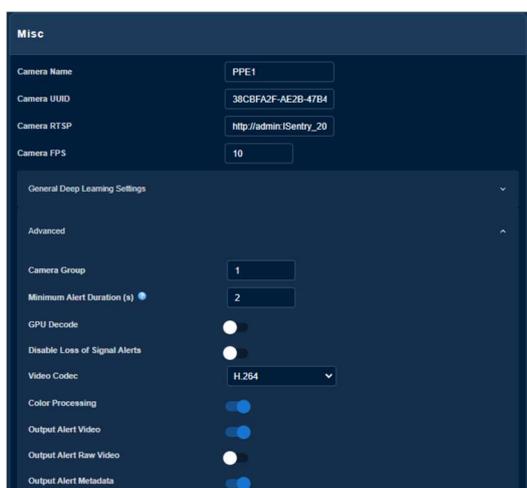SEE BEYOND

Content

1.   Objective:

The purpose of this document is to guide our customers and users in how to configure your Firefly product to detect Fire and Smoke using our video analytic solution.

2.   Track Changes:

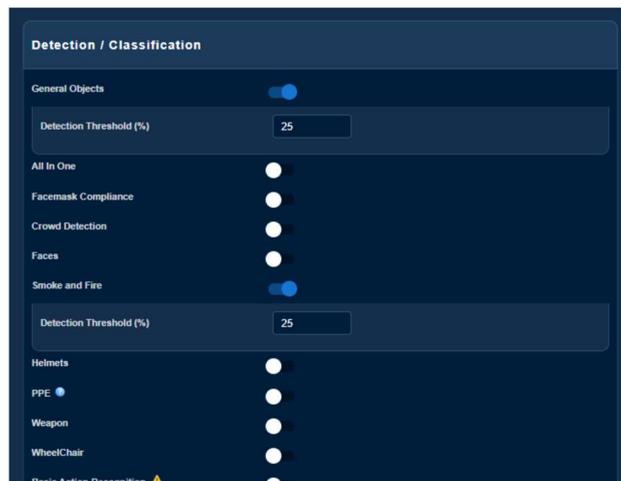| Date	Author	Description	Release
05/11/2024	PMC	All chapters changed	Draft

3.   Prerequisites:

- Latest version of FireFly 3.XX installed, licensed and up to date.

- RTSP video feed of the intended camera successfully added.

- Understanding: In the UI a Blue button means the feature is enabled.

- Understanding: In the UI a White button means the feature is disable.

- Under the Option "General Deep Learning Settings" please ensure "Output Alert Video" and "Output Alert Metadata" is enable as per the image below:

4.   Detection / Classification

Under: http://192.168.1.143:8123/settings
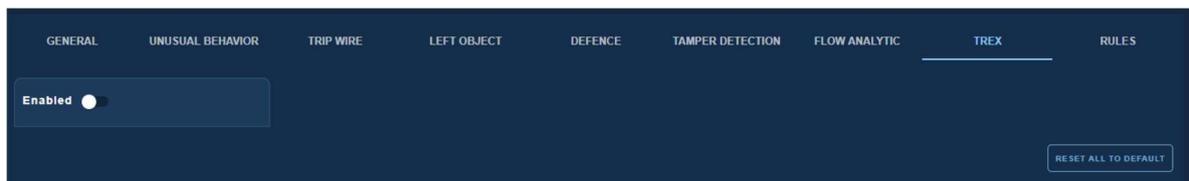
- Please log in with your credentials

- Select the camera you wish to configure from the list on the left.

- Under the Detection and Classification options on the right-hand side please enable "General Objects and Fire & Smoke Detection as per the image below:

5.   Video Analytics Configuration steps:

- Please select your camera

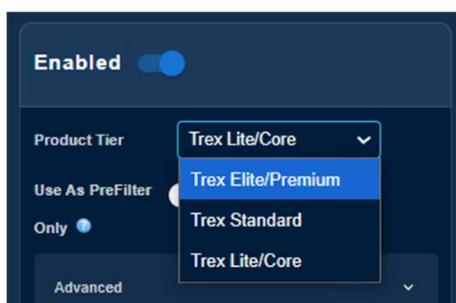- Please select "TREX"

- Please select "Enable"

Once the "TREX" Option is enable please select your Product Tier:

The detection mode in this use case is" "Object Tracking" as per the settings on the image provided.

6. Product Tier:

Once this video analytic engine is enabled now you can choose the Tier of the product you wish to use. Please note the Tier of product here is the same as the Tier of Software License you have purchased.

- **TREX Lite/Core:**

Select this option if you have purchased a TREX Lite or TREX Core software license.

- **TREX Elite/Premium:**

Select this option if you have purchased a TREX Elite or TREX Premium software license.

When selecting this option, you now have the capability to choose where do you wish the processing of this video analytic to occur.
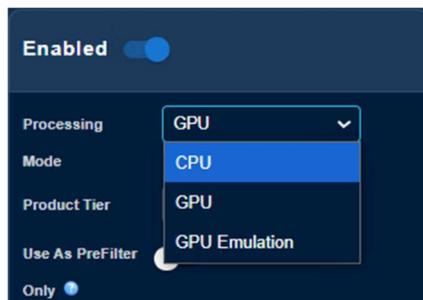
This can be on your CPU (Central Processing Unit), or GPU (Graphics Processing Unit), GPU emulation.

Please only enable these options according to your hardware capability, availability and configuration. If you are not sure, please leave the selection on CPU or contact our support team for more information.

- **TREX Standard:**

Select this option if you have purchased a TREX Standard software license.

When selecting this product tier option, you also have the capability to choose where do you wish the processing of this video analytic to occur.

This can be on your CPU (Central Processing Unit), or GPU (Graphics Processing Unit), GPU emulation.

Please only enable these options according to your hardware availability and configuration. If you are not sure, please leave it on CPU or contact our support team for more information.

7.   Time Schedule

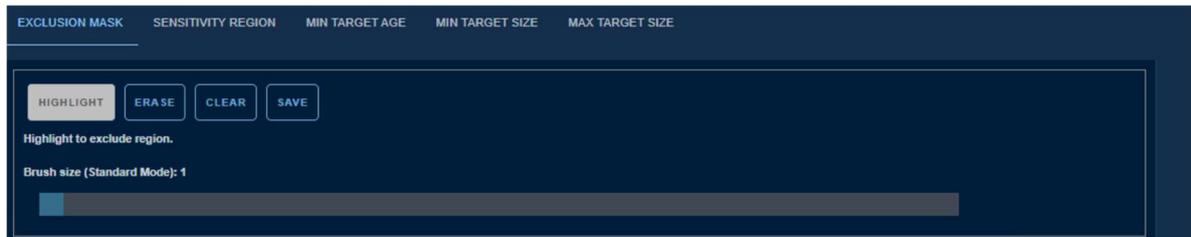- **Please select your preferred time schedule from the drop down list and select "APPLY".**

If you wish for the detection of intrusion to be enable during a particular time schedule, this needs to be configured on a different page and option called: "Time schedules" available from the top left hand side menu.

If you do not have alternative time schedules pre created and available on the drop-down list, you can always select the default.

- **Please select "Enable" option to continue:**
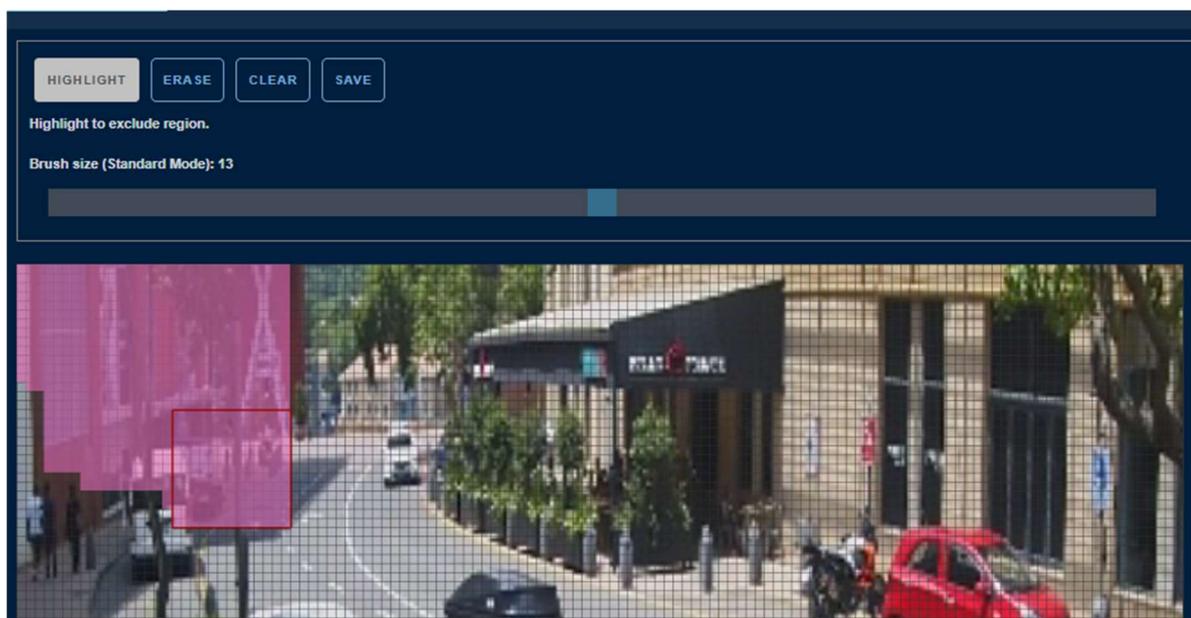
8.   Exclusion Mask:

In this area, using the Brush Size, please select any area of the FOV you wish to exclude.

This could be a private area you do not wish to detect and track.

Please find an example of an Area of exclusion, drawn with a medium size Brush. Once the desired area correctly identified and highlighted. Options to "ERASE", and "CLEAR" are available.
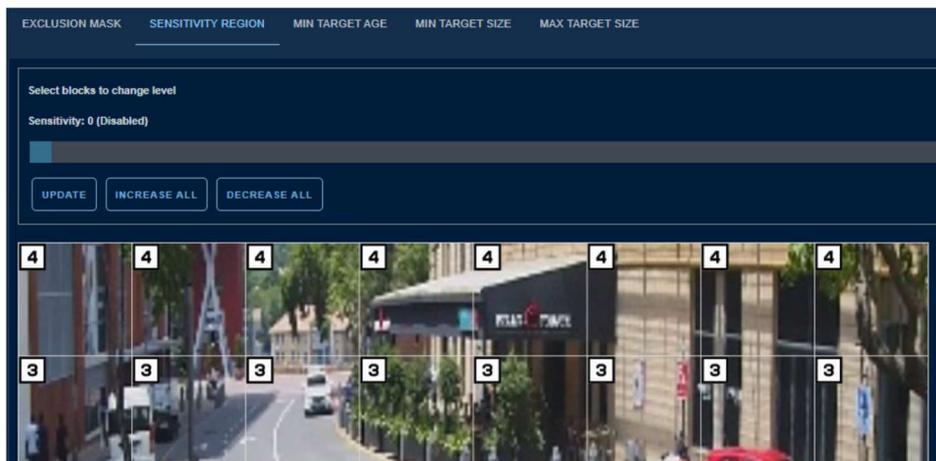
- **Once the desired Exclusion area is highlighted in pink Please press "SAVE".**

9.   Sensitivity Region:

The Sensitivity values range from "0" (Zero is off) to 6 the lower is the lowest sensitivity to the highest sensitivity being 6. Please adjust these values according to your scene.
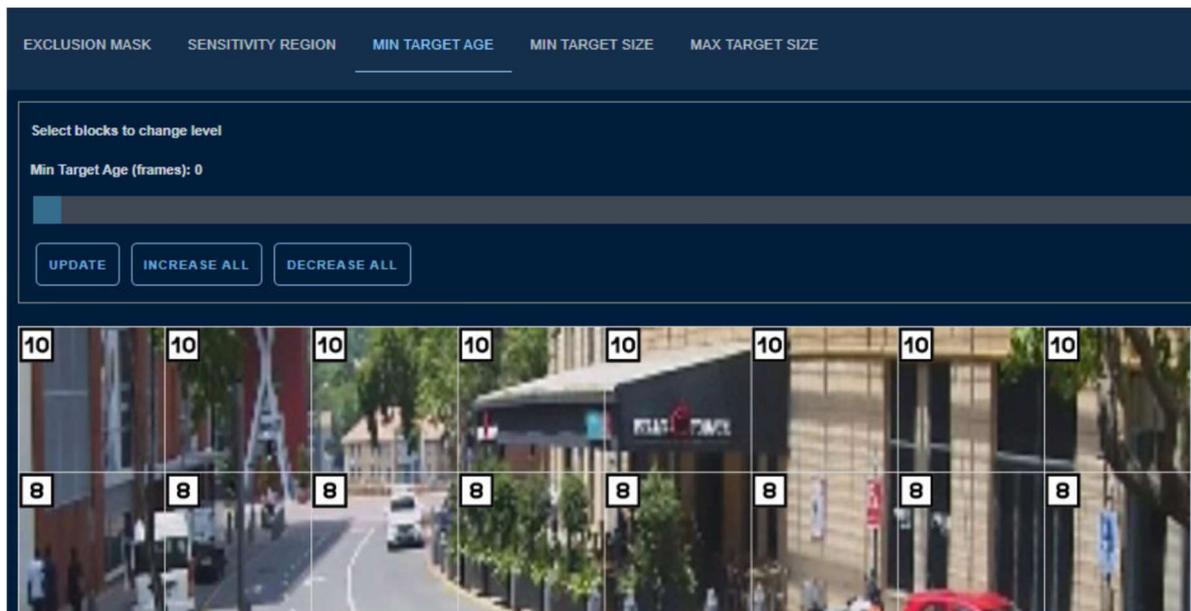
- Using the mouse please select the video block you wish to change the level of Sensitivity. Alternatively, you can use the "Increase All" and "Decrease All" options provided on the user interface as per the image below.

10. Min Target Age:

The Min (minimum) Target Age values range from "0" (Zero is off) to 9 the lower value is the lowest Target Age to the highest Target Age. Please adjust these values according to your scene.
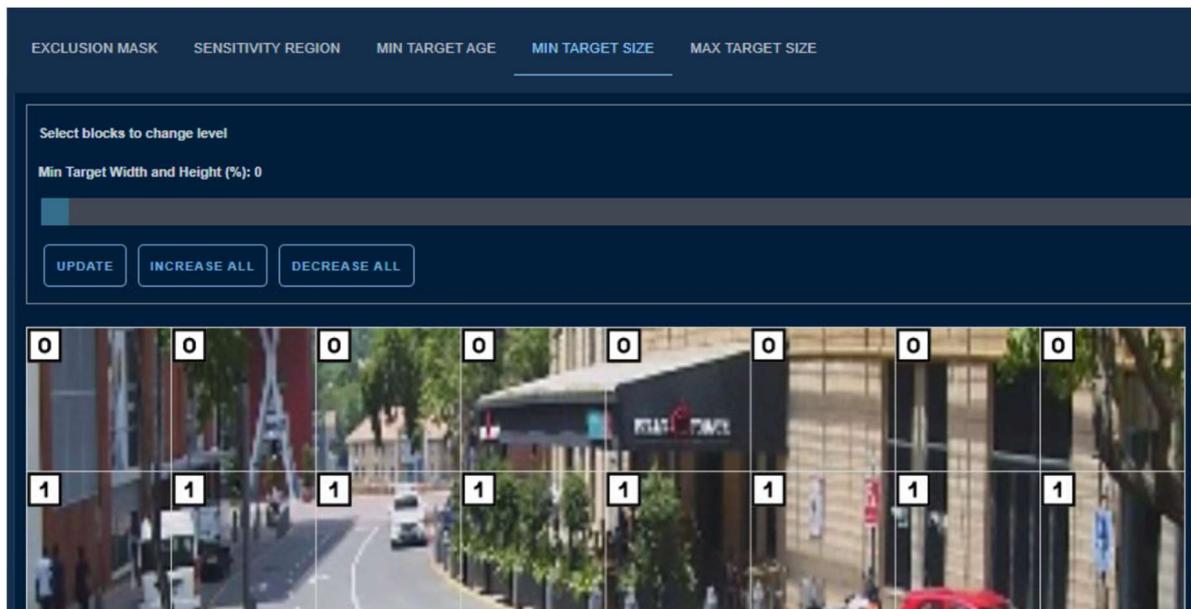
- Using the mouse please select the video block you wish to change the Min Target Age. Alternatively, you can use the "Increase All" and "Decrease All" options provided on the user interface as per the image below.

11.   Min Target Size:

The Min (minimum) Target Size values range from "0" (Zero is off) to 100% the lower % value is the smallest Target Size to the largest Target Size as per Width and Height. Please adjust these values according to your scene.
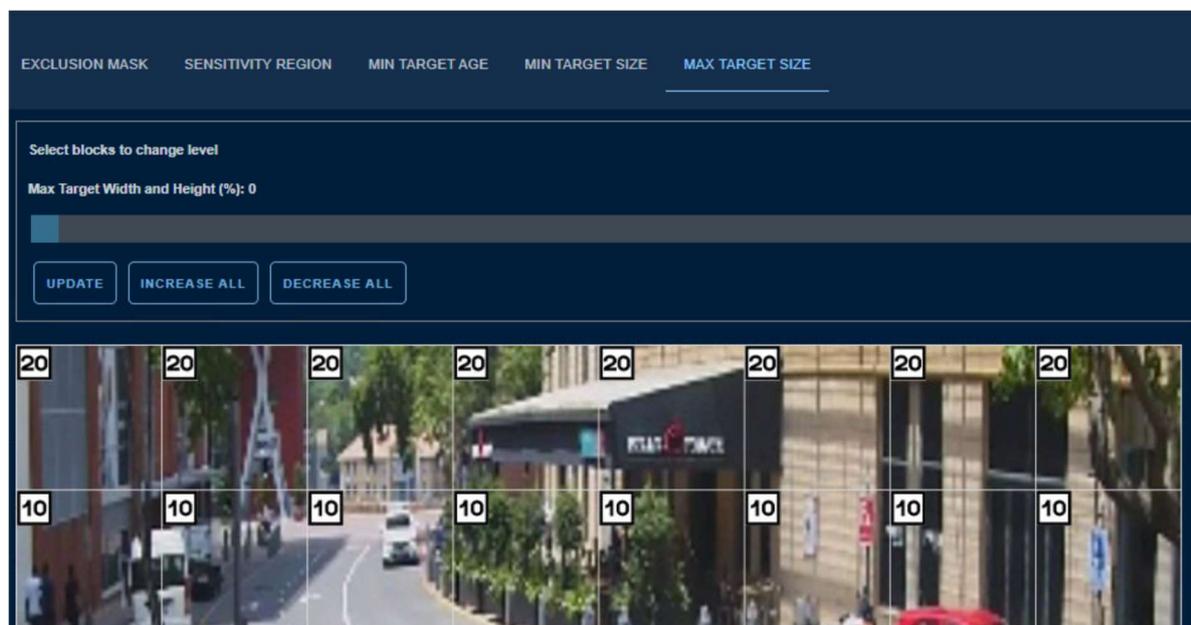
- Using the mouse please select the video block you wish to change the Min Target Size. Alternatively, you can use the "Increase All" and "Decrease All" options provided on the user interface as per the image below.

12.   Max Target Size:

The Max (maximum) Target Size values range from "0" (Zero is off) to 100% the lower % number the lower value is the smallest Target Size to the highest being the Maximum Target Size as per width and height. Please adjust these values according to your scene.
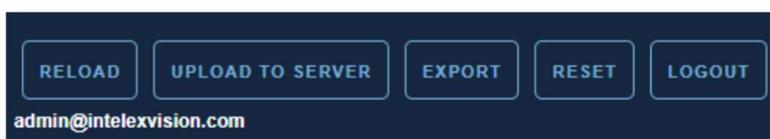
- Using the mouse please select the video block you wish to change the Min Target Age. Alternatively, you can use the "Increase All" and "Decrease All" options provided on the user interface as per the image below.
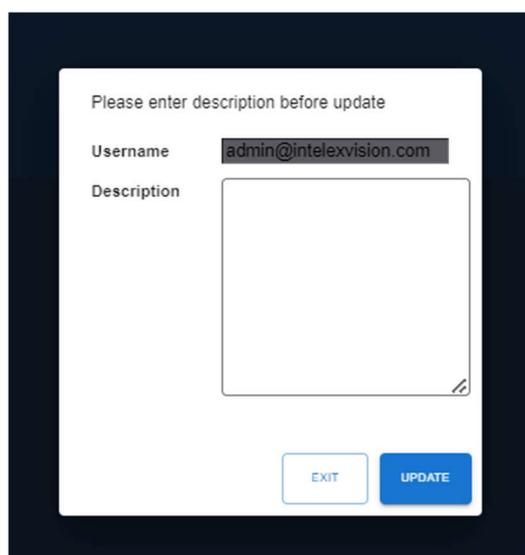
13. Saving Changes:

Once you have achieved the desired detection and tracking configuration, it is important to save these changes and applying them to the video analytic engine.

- **Please select the option "UPLOAD TO SERVER" from the top right hand side menu as per the image provided below:**

Once the option to upload is triggered, a new window will prompt more details.

- Please select the option "update" to apply the new configuration changes to the FireFly server.

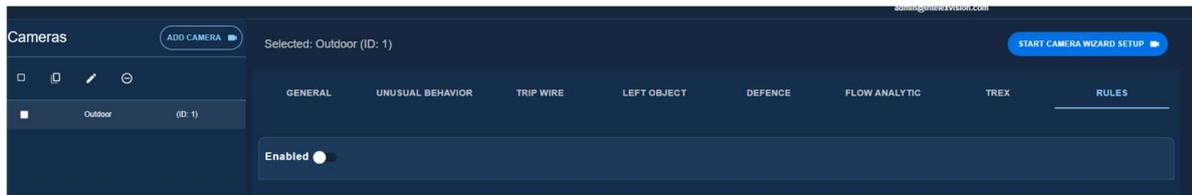Please allow for the timer to finish before reloading the screen.

Once this process has been completed, you can now continue to another page or option.
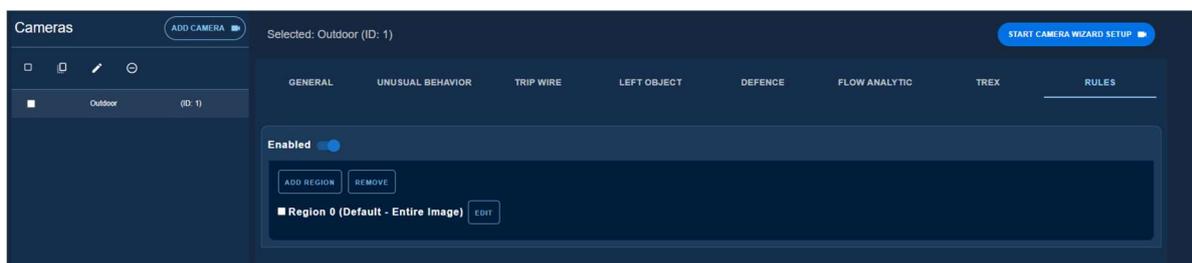
- Please re-enter your credentials and select "LOGIN".

14. Rule Configuration:

In this instance we will configure our video analytics Rules.

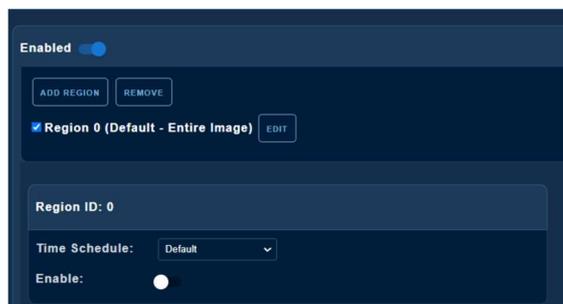- **Please select "RULES" and select "Enable".**

Once it is "Enabled", you can now add a desired region of interest or by selecting "Region 0" it will apply your settings to the entire image as the default option.
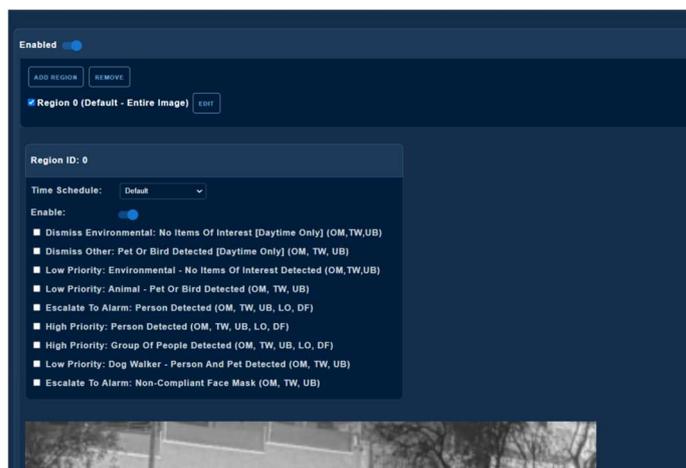

Now with the "Region 0" (entire image) enable, you can select any pre-defined time schedule from the drop down menu.

If you do not have a preferred pre-defined time schedule you can select the "Default".

- **Please select the option "Enable" to begin to deliver the remaining Rule configuration.**

Now with the Rule engine time schedule enable, you can select a pre-configured template Rule to execute from the list provided below.

Depending on your needs, camera resolution, positioning and filed of view, you can enable one or multiple Rules to execute on this camera.

If you wish to have separate rules for a different region on the FOV, please use the "ADD REGION" option. Or you can erase an existing region of interest.

Now select the rule you wish to apply from the list of rules available.

Once "High Priority: Fire Detected" rule is selected from the list of rules available, please do not forget to upload your new settings to the server. This is described step by step under **chapter 13.**

Please review your settings and then test the detection sensitivity, distance etc and adjust accordingly. Please remember to "Upload to server" once you have perfected your settings.

If you have any questions or need any further support do not hesitate to reach us under:

CustomerServices@intelexvision.com