Nx Witness & Hikvision

Temperature Screening Thermographic Camera Integration Solution

Overview

This paper is intended to introduce the integration configuration between Hikvision temperature screening thermographic camera and Nx Witness.

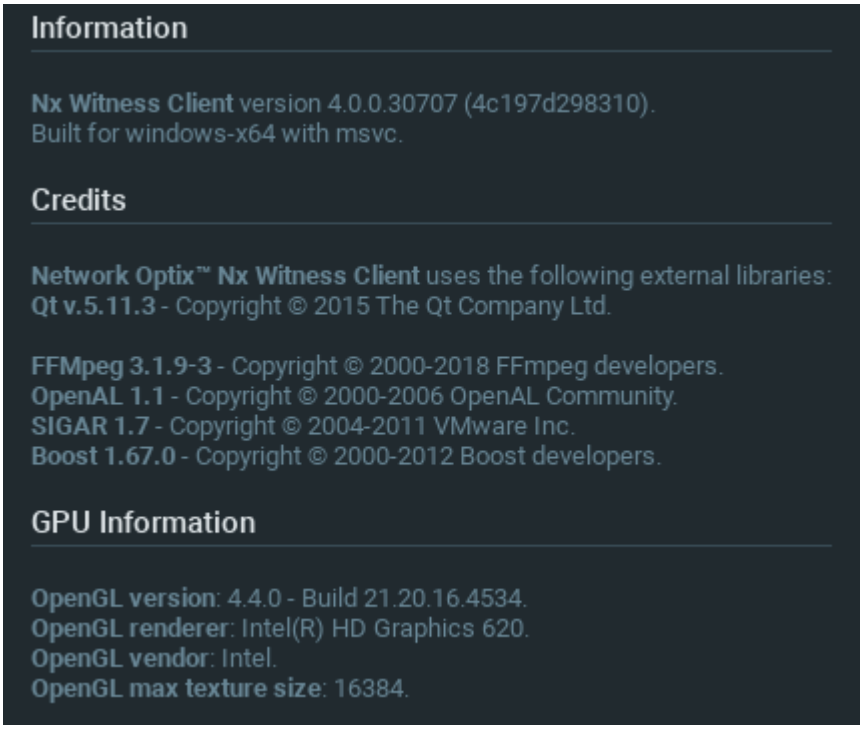
Supported Features

Live view	Playback	Face Capture alarm	Abnormal Temperature Alarm	Motion Alarm
√	√	√	√	√

1. Test environment

- **Nx Witness Client version**

4.0.0.30707 built for windows –x64 with msvc.



- **Hikvision temperature screening thermographic camera**

		Model list	Firmware version
Fixed Short-range Thermal Screening	Economical Thermal Products	DS-2TD2617B-3/PA DS-2TD2617B-3/PA DS-2TD2617B-6/PA DS-2TD1217B-3/PA DS-2TD1217B-6/PA	Customized V5.5.26_200701
Fixed Long-range Thermal Screening	High-End Thermal Products	DS-2TD2637B-10/P DS-2TD2636B-13/P DS-2TD2636B-15/P	

DS-2TD2617B

DS-2TD1217B

DS-2TD2636B/ DS-2TD2637B

Temperature measurement range: 30-45℃

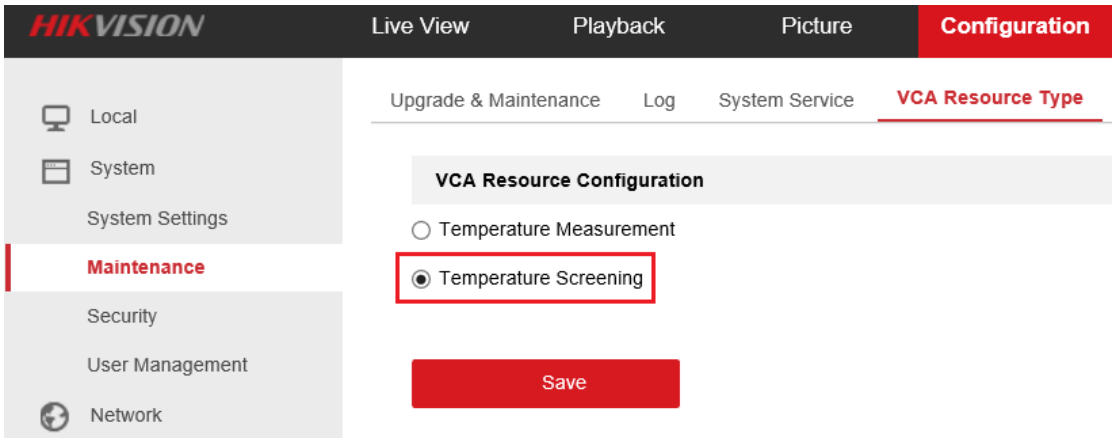
Working temperature: 10-35℃

Accuracy: ±0.5℃

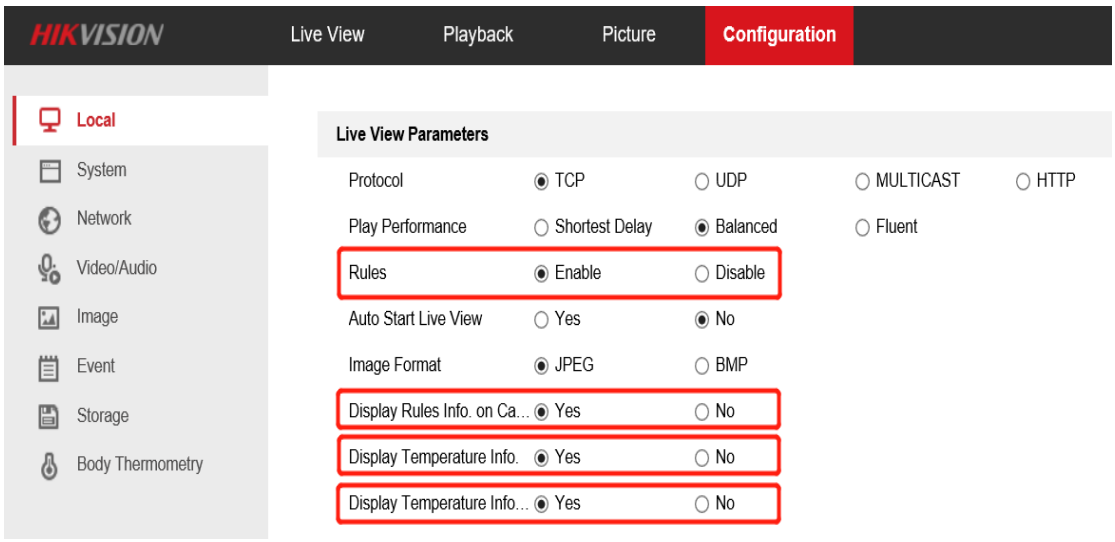
2. Configuration Guide

2.1 Camera Configuration

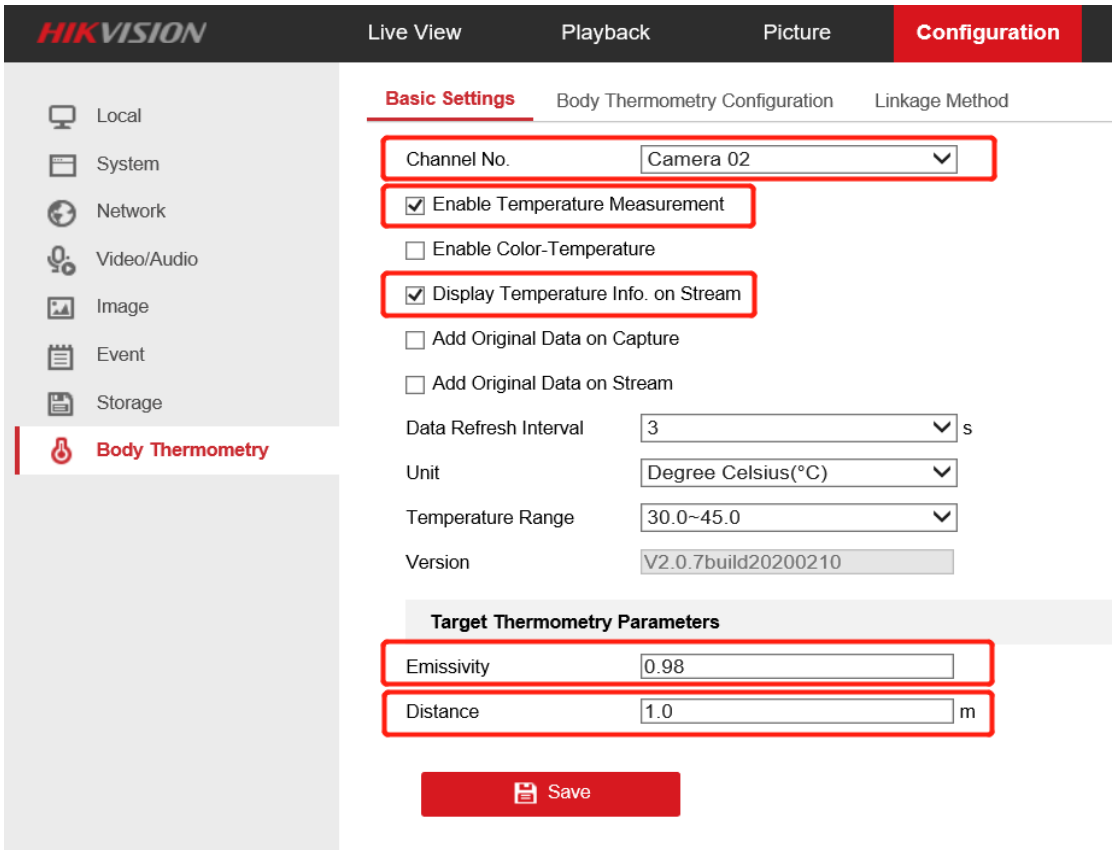
2.1.1 Select Temperature Screening as VCA Resource Type.



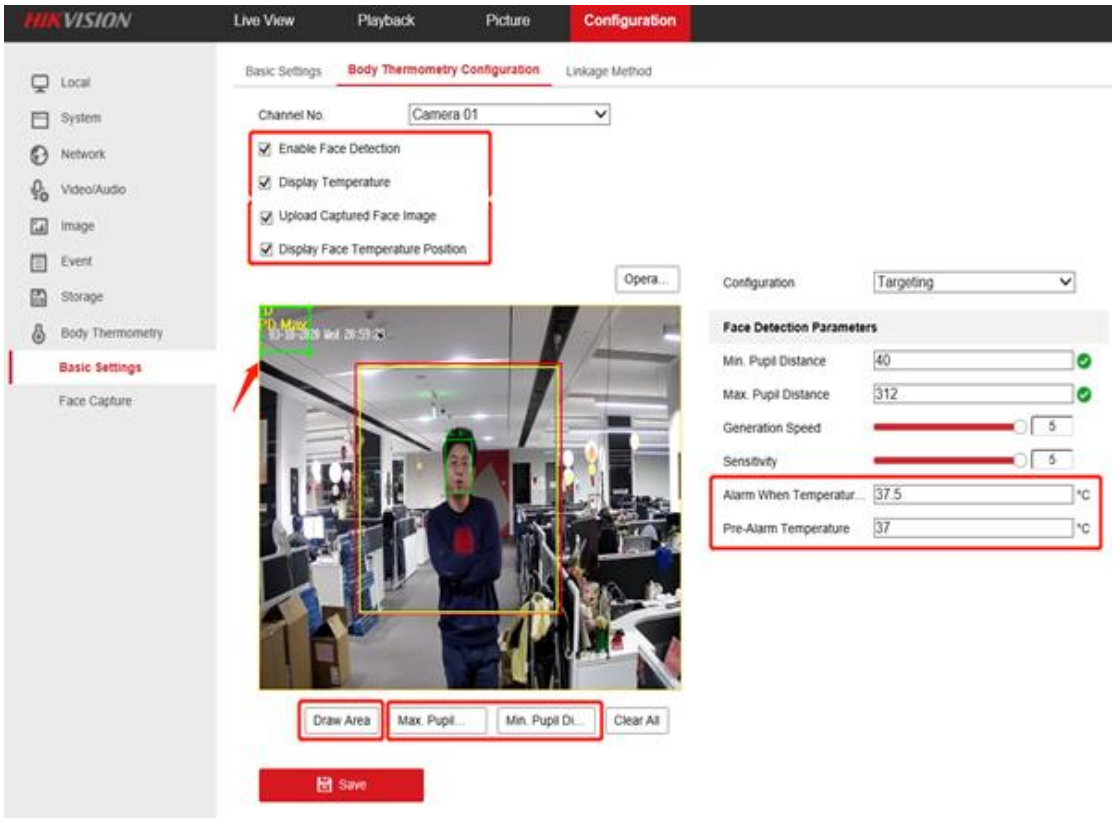
2.1.2 Go to Local Configuration interface, enable and save the following settings:



2.1.3 Go to Body Thermography Basic Settings. Configure and save the following settings:



2.1.4 Configure Camera 01 (Optical) Settings.

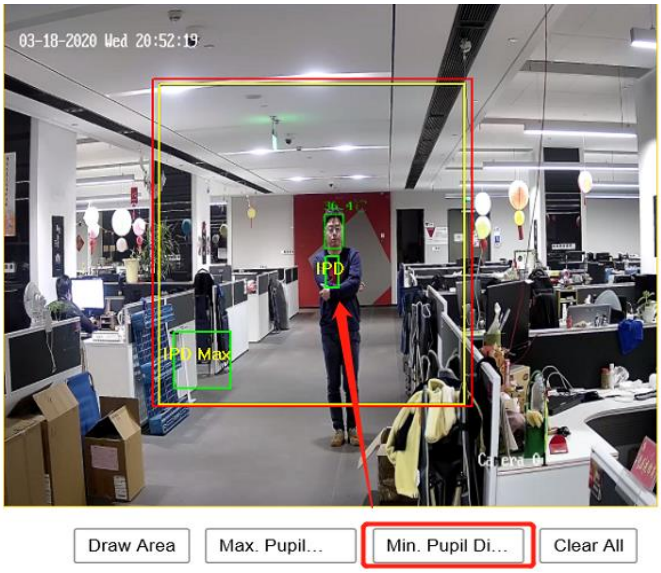


Check **Enable Face Detection** and **Display Temperature.**

Set **Alarm Temp.** and **Pre-alarm Temp.**

Press **Draw Area** to adjust face detection region.

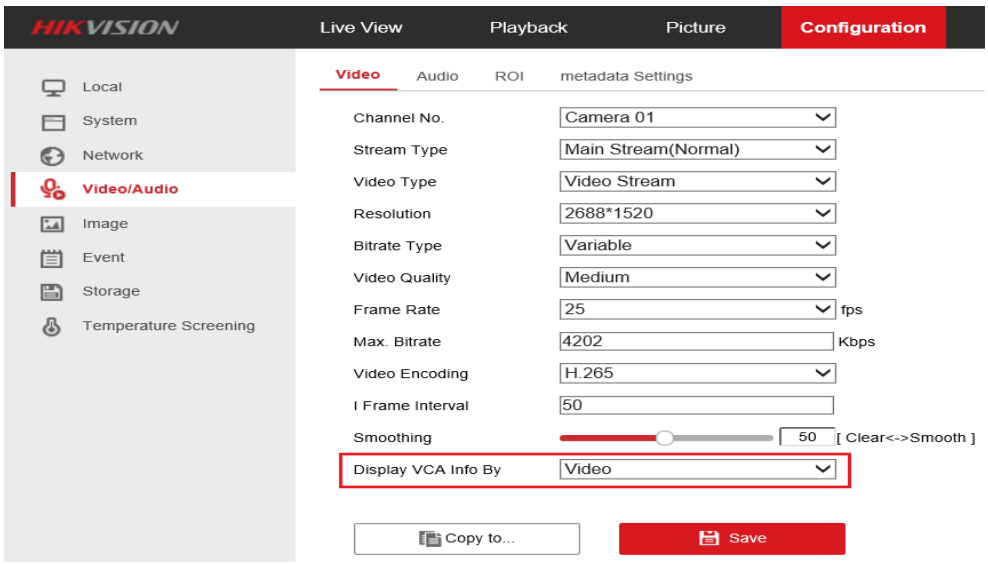
Click **Max. Pupil Distance** and **Min. Pupil Distance** to draw width filter frame, Max and Min distance refer to camera detection distance.



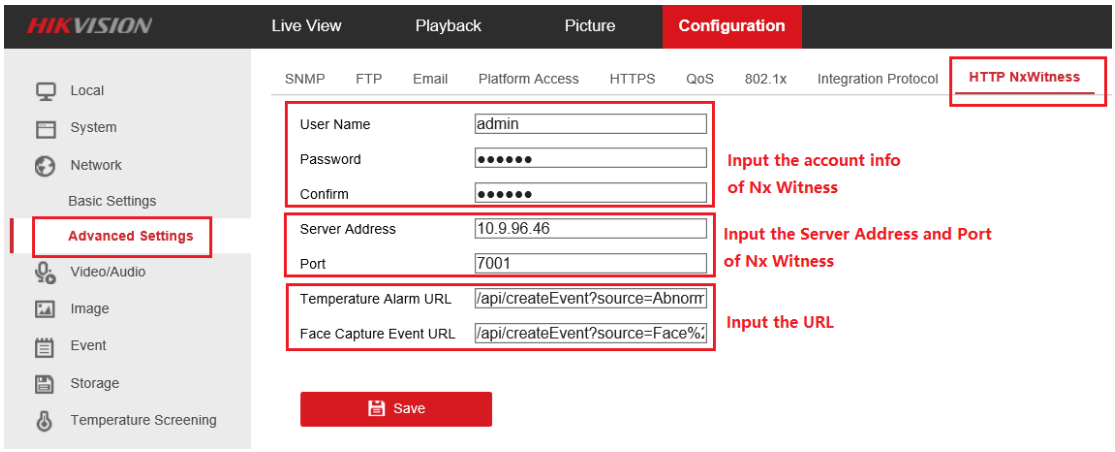
2.1.5 Configure Camera 02 (Thermal) Settings.

Uncheck **Enable Blackbody Correction** If no blackbody is used.
Check **Enable** of **Body Temperature Compensation** and keep parameters as default.

2.1.6 Make sure to choose 'Display VCA Info By Video'. (default Configuration)



2.1.7 Create the Nx 'HTTP Generic Event' in order to upload the temperature alarm to Nx Witness

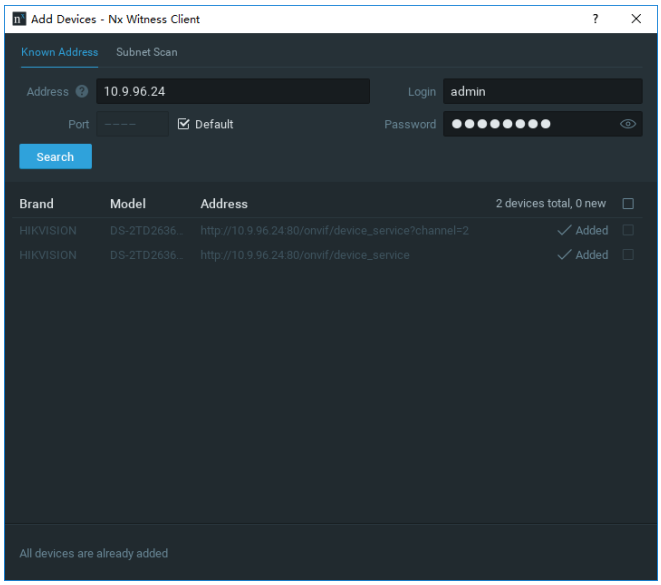


Temperature Alarm URL:
/api/createEvent?source=Abnormal%20Temperature&caption=Main%20Entry%20Thermal&description=
Face Capture Event URL:
/api/createEvent?source=Face%20Capture&caption=Main%20Entry%20Thermal&description=

2.2 Nx Witness Configuration

2.2.1 Add the camera

Login Nx Witness, Enter Cameras Settings->Edit Credentials to input the correct authentication info to add auto detected thermal cameras or manually add cameras.



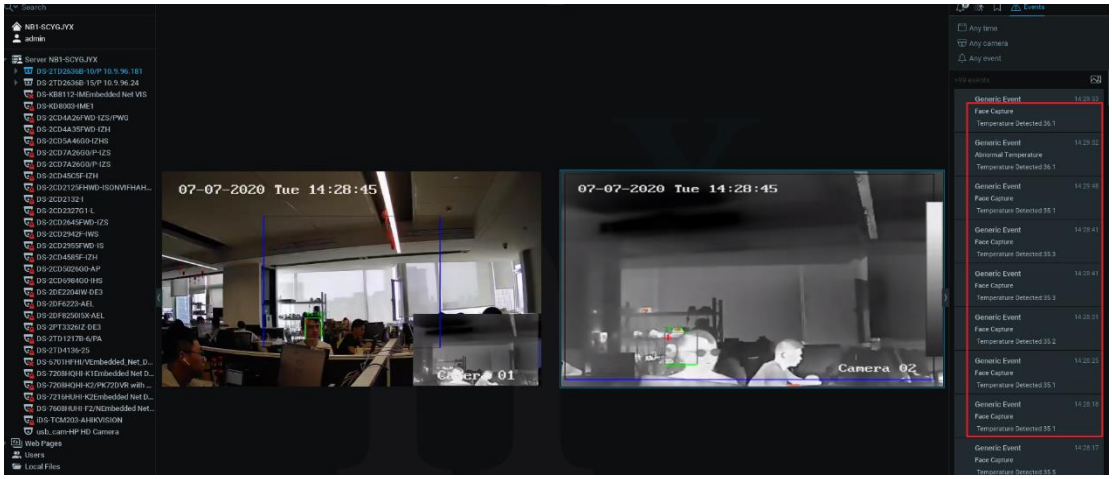
2.2.2 Preview the camera and receive events

- **Live view**

Then double click the channel to preview. Click recording bar to enter Playback.
Face temperature info and the intelligent box overlay on video stream directly.

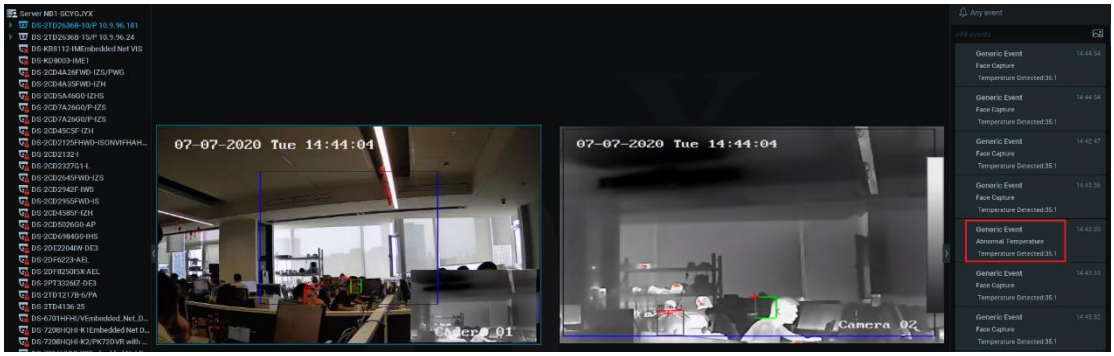
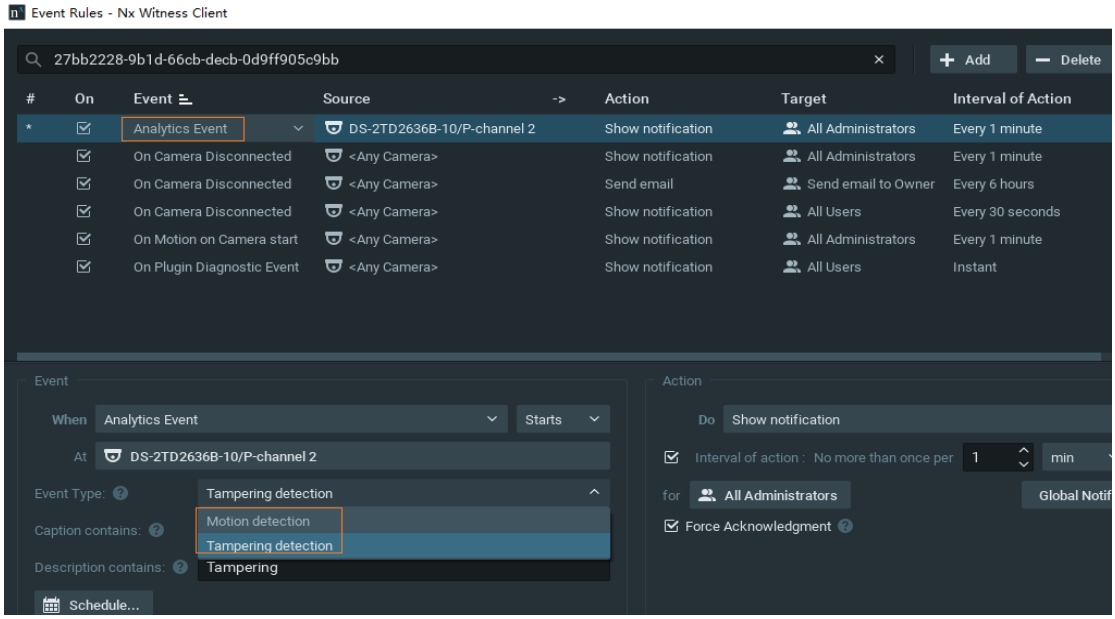
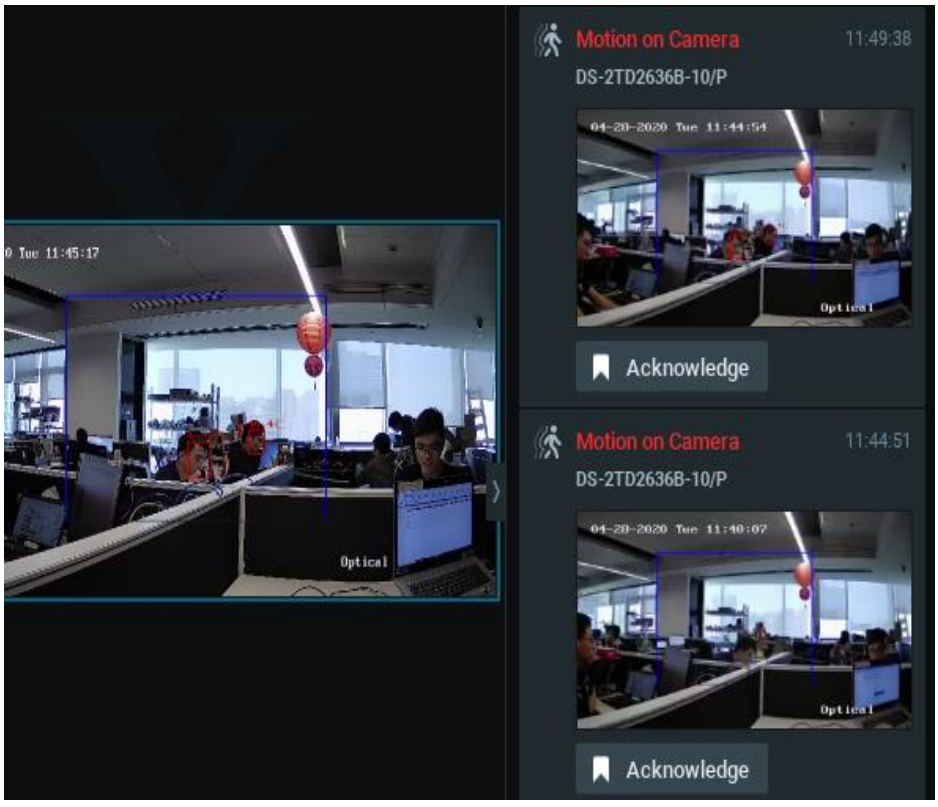
- **Face Capture alarm**

As Nx 'HTTP Generic Event' are created and configured in camera, when face is detected, Nx will receive the 'Face Capture' alarm from camera.



- **Abnormal Temperature Alarm**

Similarly, when the temperature exceeds the preset value, Nx will receive 'Abnormal Temperature' alarm.



- **Motion Alarm**