

Event

SUNAPI

v2.6.2

2023-04-07



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Chapter 1. Overview

1.1. Events

Using SUNAPI event related APIs, it can be defined when and how certain actions should be performed by a video surveillance product. For example, a camera can be set to upload images to an FTP server or send notification messages when it detects motion. Events can be scheduled to run at certain times, or they can be triggered by things happening, such as motion detection or a signal from an input port.

eventsources.cgi uses the following submenus to configure events:

- **videoanalysis**: Configures settings for video analysis. Video Analytics creates a virtual area or boundary line over the site where the video surveillance device is installed, then generates actions when it detects motion in the virtual area or across the line. It can detect if there is motion inside or outside the defined area, and it can detect if objects enter, exit, appear, or disappear in the area. In addition, it can detect if an object crosses the boundary line from the left or right side.
- **videoanalysis2**: This is same as video analysis submenu but can be configured the parameters for each ROI/areas.
- **audioanalysis**: Configures the settings for audio analytic events.
- **fogdetection**: Configures the settings for fog detection. This submenu can specify the sensitivity level for fog detection and enables the auto defog.
- **facedetection**: Configures the settings for face detection. This submenu can specify the sensitivity level for face detection, or it can set up a virtual area which causes the camera to react when a face is detected inside or outside the area.
- **tamperingdetection**: Configures the settings for scene changes, which are usually a sign of tampering with the video surveillance device. The submenu can specify various settings such as the sensitivity level for tampering detection.
- **audiodetection**: Configures the settings for audio detection. Settings include the detection input threshold level.
- **videoloss**: Configures video loss detection settings.
- **autotracking**: Configures auto tracking settings.
- **timer**: Configures the schedule for the timer, which can generate events periodically.
- **alarminput**: Configures the settings of the alarm input function.
- **networkalarminput**: Configures the network alarm input function.
- **networkdisconnect**: Configures whether or not an event should be generated when network disconnection happens.
- **defocusdetection**: Configures the settings for defocus detection.
- **peoplecount**: Configures the settings for people count feature.
- **heatmap**: Configures the settings for heat map feature.
- **sourceoptions**: Gives information about the list of event sources available and associated action triggers.

- **samples:** Gets the samples of event levels for the corresponding event source.
- **queuemanagementsetup:** Configures the settings for the queue management feature.
- **gsensor:** Configures the settings for the G sensor feature.
- **temperaturechangedetection:** Configures the settings for temperature change detection.
- **temperaturechangedetectionoptions:** Gives information about temperature change detection options.
- **shockdetection:** Configures the settings for shock detection.
- **wiperhousingdetection:** Configures the settings for wiper housing detection.
- **boxtemperaturedetection:** Configures the settings for box temperature detection.
- **boxtemperaturedetectionoptions:** Gives information about box temperature detection options.
- **objectdetection:** Configures object detection algorithm for the camera.
- **metaimagetransfer:** Configures metadata image sending capability.
- **facerecognition:** Configures face recognition on selected channels
- **ocr:** Configures character recognition on selected channels
- **thermaldetectionmode:** Configures thermal camera operation mode.
- **bodytemperaturedetection:** Configures human body temperature detection
- **bodytemperaturedetectionoptions:** Provides the settings for bodytemperaturedetection.
- **temperaturemeasurementregion:** Configures the region to measure human body temperature.
- **maskdetection:** Configures face mask detection.
- **Cellmotion:** Configures cell-based motion detection.
- **parkingdetection:** Configures the settings for parking detection.
- **ledindicator:** Configures LED settings used for indicating current parking status.
- **callrequest:** Configures the settings for SIP Call request events.
- **dtmf:** Configures the settings for DTMF events.
- **tamperingswitch:** Configures the settings for tampering switch events.
- **proximitysensor:** Configures the settings for proximity sensor events.
- **socialdistancingviolation:** Configures the settings for social distancing violation detection.
- **mqttpublication:** Configures the settings for MQTT publication messages.
- **mqttsubscription:** Configures the settings for MQTT subscription messages.

eventactions.cgi uses the following submenus to configure the actions that a NVR will perform when an event occurs:

- **smtp:** Specifies the event types to send an alert message by email as well as the relevant email settings.
- **audioclipschedule:** Configures for making schedule to control audioclips.

- **complexaction:** Specifies the event types for an alarm output and the duration as well as the preset index that the camera will move to when a specified event occurs.

1.2. Event rule

An event rule defines when and how to react to events that are generated by the camera. For example, a rule may stipulate that the video surveillance device makes alarm output for 5 seconds when a motion is detected between 2 AM and 2 PM on Saturday.

Use **eventrules.cgi** to create various rules by specifying the event type, event action and applicable time.

- **handover:** Configures the settings for handover feature.
- **scheduler:** Configures the schedule settings for report generation for the people count, heat map, and queue management features.
- **handover2:** This is the same as handover submenu, but can be used to configure the handover parameters in a generic way, such that the handover feature can be associated with different camera events.
- **schedulelist:** This submenu is used to configure schedulers in a device that can be associated with the dynamicrules submenu.
- **dynamicrules:** This submenu is used to manage eventactions upon receiving an event in a device.
- **dynamicrulesoptions:** This submenu provides information about the list of event sources and associated action triggers available in dynamicrules.
- **indicationpass:** This submenu is used to manage the configuration to pass information to an opponent camera when parking detection event occurs.
- **audiooutfiles:** This submenu is used to manage the audio files in camera and audio management system (AMS).
- **ttsfiles:** This submenu is used to manage the tts files in the audio management system (AMS).
- **ledpreset:** This submenu is used to manage LED preset related settings.

1.3. Event status

The event status can be requested using **eventstatus.cgi**.

The current status may be sent once or continuously. When the status is sent continuously, it can be configured to receive all events data during the first response, but later only event data changes are sent.

- **eventstatus:** Requests the current event status.
- **pushnotification:** Configures the push notification feature in NVR.
- **eventscheme:** Chooses whether old or new topics should be used in the ONVIF event service.
- **metadataschema:** Provides schema of metadata events generated from the camera when an event occurs.
- **eventstatusschema:** Provides event schema of all events.

1.4. Transfer method and configuration

transfer.cgi configures the FTP, and SMTP server settings so that images and messages can be transferred when an event occurs.

Chapter 2. Event Sources

2.1. Video Analytics Setup

2.1.1. Description

The **videoanalysis** submenu configures the video analysis settings.

NOTE

This chapter applies to the network cameras and encoder only.

Attribute to check for video analytics support: "attributes/Eventsource/Support/Channel.#.IVRule"

Attribute to check for maximum IV Rules: "attributes/Eventsource/Limit/MaxIVRule"

Attribute to check for motion detection support:

"attributes/Eventsource/Support/VA.MotionDetection"

Camera/Encoder gives adjusted coordinates based on flip/mirror/rotate settings when the "/attributes/Eventsource/Support/AdjustMDIVRuleOnFlipMirror" parameter is set to False. Otherwise, camera provides original coordinates and client has to perform coordinate adjustment based on flip/mirror/rotate settings.

Access level

Action	Camera	Encoder
view	Admin	Admin
set	Admin	Admin
remove	Admin	Admin

2.1.2. Syntax

```
http://<Device IP>/stw-cgi/eventsources.cgi?submenu=
videoanalysis&action=<value> [&<parameter>=<value>]
```

2.1.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads video analysis settings
	Channel	REQ, RES	<csv>	Channel ID

Action	Parameter	Request/ Response	Type/ Value	Description
	DetectionType	REQ	<enum> MotionDetection, IntelligentVideo, Off, MDAndIV	Detection type DetectionType for the view action requests the current video analysis settings and does not change the configured detection type.
set	Channel	REQ, RES	<int>	Channel ID
	DetectionType	REQ, RES	<enum> MotionDetection, IntelligentVideo, Off, MDAndIV	Detection type <ul style="list-style-type: none"> • MotionDetection: Detects motion within the specified area. • IntelligentVideo: Detects objects' appearing, disappearing, entering, exiting, scene changes, etc within the specified area. • Off: No detection. • MDAndIV: Both motion detection and intelligent video functions work together.
	Sensitivity	REQ, RES	<enum> VeryLow, Low, Medium, High, VeryHigh	Sensitivity level for MotionDetection or IntelligentVideo. Sensitivity is valid only when DetectionType is NOT set to Off.
	ObjectSize	REQ, RES	<enum> VerySmall, Small, Medium, Large, VeryLarge	Size of detectable objects for motion detection

Action	Parameter	Request/ Response	Type/ Value	Description
	MinimumObjectSize	REQ, RES	<string>	<p>Minimum size of objects detectable by motion detection.</p> <p>Objects smaller than the specified minimum size is not detected.</p> <p>The size is specified in the format of <width, height>.</p> <p>The value of MinimumObjectSize must be less than the value of MaximumObjectSize.</p> <p>MinimumObjectSize is valid only when DetectionType is NOT set to Off.</p>
	MaximumObjectSize	REQ, RES	<string>	<p>Maximum size of objects detectable by motion detection</p> <p>Objects bigger than the maximum size is not detected.</p> <p>The size is specified in the format of <width, height>.</p> <p>The value of MaximumObjectSize must be greater than the value of MinimumObjectSize.</p> <p>MaximumObjectSize is valid only when DetectionType is NOT set to Off.</p>
	MinimumObjectSizeIn Pixels	REQ, RES	<string>	<p>Minimum object size in pixel</p> <p>The size is specified in the format of <width, height>.</p> <p>MinimumObjectSizeInPixels is valid only when DetectionType is NOT set to Off.</p>

Action	Parameter	Request/ Response	Type/ Value	Description
	MaximumObjectSizeInPixels	REQ, RES	<string>	<p>Maximum object size in pixel</p> <p>The size is specified in the format of <width, height>.</p> <p>MaximumObjectSizeInPixels is valid only when DetectionType is NOT set to Off.</p>
	ROI.#.Coordinate	REQ, RES	<string>	<p>ROI (Region of Interest) coordinates</p> <p>ROI.#.Coordinate is valid only when DetectionType is NOT set to Off.</p>
	ROIMode	REQ, RES	<enum> Inside, Outside	<p>ROI detection mode</p> <ul style="list-style-type: none"> • Inside: Detects motion within the specified ROI • Outside: Detects motion outside the specified ROI <p>ROIMode is valid only when DetectionType is NOT set to Off.</p>
	DetectionResultOverlay	REQ, RES	<bool> True, False	<p>Whether to mark detected motions on the screen in a box when an event occurs</p> <p>DetectionResultOverlay is valid only when DetectionType is NOT set to Off.</p>
	DisplayRules	REQ, RES	<bool> True, False	<p>Whether to show the video analytics on the web client monitoring page</p> <p>DisplayRules is valid only when DetectionType is set to IntelligentVideo.</p>

Action	Parameter	Request/Response	Type/Value	Description
	DefinedArea.#.Mode	REQ, RES	<csv> AppearDisappear, Entering, Exiting	<p>Defined virtual area detection mode</p> <ul style="list-style-type: none"> • AppearDisappear: Detects objects appearing or disappearing in the specified virtual area. • Entering: Detects objects entering the specified virtual area. • Exiting: Detects objects exiting the specified virtual area. <p>DefinedArea.#.Mode is valid only when DetectionType is set to IntelligentVideo.</p> <p>DefinedArea.#.Coordinate must be sent together with DefinedArea.#.Mode.</p> <div> <p>Note</p> <p>DefinedArea.#.Mode, DefinedArea.#.Coordinate, Line.#.Mode, and Line.#.Coordinate must be sent together with the set action.</p> </div>
	DefinedArea.#.Coordinate	REQ, RES	<string>	<p>Top left and bottom right vertices of the defined virtual area for motion detection</p> <p>DefinedArea.#.Coordinate is valid only when DetectionType is set to IntelligentVideo.</p> <p>DefinedArea.#.Mode must be sent together with DefinedArea.#.Coordinate.</p>

Action	Parameter	Request/ Response	Type/ Value	Description
	EntireAreaMode	REQ, RES	<csv> Off, AppearDisappear, Scenechange	<p>Entire area detection mode</p> <ul style="list-style-type: none"> • Off: Disables the entire area detection mode • AppearDisappear: Detects objects appearing or disappearing in the entire area • Scenechange: Detects scene change events, which are triggered when a large portion of the scene is changed. <p>EntireAreaMode is valid only when DetectionType is set to IntelligentVideo.</p>
	Line.#.Mode	REQ, RES	<csv> LeftSide, RightSide	<p>Line detection mode</p> <ul style="list-style-type: none"> • LeftSide: Detects motion to the left of the virtual line. • RightSide: Detects motion to the right of the virtual line. <p>Line.#.Mode is valid only when DetectionType is set to IntelligentVideo.</p> <p>The Line.#.Mode parameter must be sent along with Line.#.Coordinate.</p>

Action	Parameter	Request/ Response	Type/ Value	Description
	Line.#.Coordinate	REQ, RES	<string>	<p>X and Y coordinates of the two points which define the virtual line</p> <p>The coordinates are specified in the form of <x1,y1,x2,y2>; x1 and y1 are the start points and x2 and y2 are the end points.</p> <p>Line.#.Coordinate is valid only when DetectionType is set to IntelligentVideo.</p> <p>The Line.#.Coordinate parameter must be sent together with Line.#.Mode.</p>
remove	Channel	REQ	<int>	ID of the channel to be deleted
	LineIndex	REQ	<csv> All, #	Index of the virtual line to be deleted
	DefinedAreaIndex	REQ	<csv> All, #	Index of the virtual area to be deleted
	ROIIndex	REQ	<csv> All, #	Index of the ROI to be deleted

2.1.4. Examples

2.1.5. Getting the current video analytics settings of 'Channel 0'

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=videoanalysis&action=view&Channel=0
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

```
Channel.0.DetectionType=IntelligentVideo
Channel.0.Sensitivity=Medium
```

```
Channel.0.MinimumObjectSize=4,5
Channel.0.MaximumObjectSize=47,64
Channel.0.MinimumObjectSizeInPixels=192,192
Channel.0.MaximumObjectSizeInPixels=1944,1944
Channel.0.ROI.Mode=Inside
Channel.0.ROI.1.Coordinate=1725,925,1157,1613,2544,1225,2307,438
Channel.0.DefinedArea.1.Mode=Entering
Channel.0.DefinedArea.1.Coordinate=1307,782,2000,707,1763,1519,957,1613
Channel.0.Line.1.Mode=LeftSide,RightSide
Channel.0.Line.1.Coordinate=1194,682,1075,1382
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "VideoAnalysis": [
    {
      "Channel": 0,
      "DetectionType": "IntelligentVideo",
      "Sensitivity": "Medium",
      "MinimumObjectSize": "4,6",
      "MaximumObjectSize": "48,64",
      "MinimumObjectSizeInPixels": "192,192",
      "MaximumObjectSizeInPixels": "1944,1944",
      "ROI.Mode": "Inside",
      "ROIs": [
        {
          "ROI": 1,
          "Coordinates": [
            {
              "x": 1725,
              "y": 925
            },
            {
              "x": 1157,
              "y": 1613
            }
          ]
        }
      ]
    }
  ]
}
```

```

        "x": 2544,
        "y": 1225
    },
    {
        "x": 2307,
        "y": 438
    }
]
}
],
"Lines": [
    {
        "Line": 1,
        "Mode": [
            "RightSide",
            "LeftSide"
        ],
        "Coordinates": [
            {
                "x": 1194,
                "y": 682
            },
            {
                "x": 1075,
                "y": 1382
            }
        ]
    }
],
"DefinedAreas": [
    {
        "DefinedArea": 1,
        "Mode": [
            "Entering"
        ],
        "Coordinates": [
            {
                "x": 1307,
                "y": 782
            },
            {

```

```

        "x": 2000,
        "y": 707
    },
    {
        "x": 1763,
        "y": 1519
    },
    {
        "x": 957,
        "y": 1613
    }
]
}
]
}
]
}
}

```

2.1.6. Setting intelligent video analysis

Setting video analytics to detect objects appearing/disappearing within the defined virtual area

DetectionType must be set to IntelligentVideo to define the virtual area (using the **DefinedArea.#.Coordinate** parameter) and the detection mode within the area (using the **DefinedArea.#.Mode** parameter).

NOTE

Attribute to check for maximum area rules:
"attributes/Eventsource/Limit/MaxIVRule.Area"

REQUEST

```

http://<Device IP>/stw-
cgi/eventsources.cgi?submenu=videoanalysis&action=set&DetectionType=Intelli
gentVideo&DefinedArea.1.Mode=AppearDisappear&DefinedArea.1.Coordinate=151,43
7,1139,184,384,639,1347,1061

```

Setting video analytics to detect objects crossing the virtual line from the right side

DetectionType must be set to IntelligentVideo to define the coordinates of the virtual line (using the **Line.#.Coordinate** parameter) and the detection mode (using the **Line.#.Mode** parameter).

NOTE

Attribute to check for Maximum Line Rules:
"attributes/Eventsource/Limit/MaxIVRule.Line"

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?submenu=videoanalysis&action=set&DetectionType=Intelli  
gentVideo&Line.2.Mode=RightSide&Line.2.Coordinate=650,750,622,410
```

2.1.7. Setting motion detection with high sensitivity

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?submenu=videoanalysis&action=set&DetectionType=MotionD  
etection&Sensitivity=High
```

2.1.8. Setting the minimum/maximum size of detectable objects

The minimum object size value must be less than the value of **MaximumObjectSize**, and the maximum object size value should be greater than the value of **MinimumObjectSize**.

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?submenu=videoanalysis&action=set&DetectionType=Intelli  
gentVideo&MinimumObjectSize=0,0&MaximumObjectSize=20,20
```

2.1.9. Setting the coordinates of ROI 1

Setting the coordinates of ROI 1 and setting the detection mode to detect motion within the specified ROI

Based on the ROI type, the number of coordinates that has to be sent to create a new ROI will vary.

NOTE

Attribute to check for Maximum ROI Supported: "attributes/Eventsource/Limit/MaxROI"
Attribute to check for ROI type: "attributes/Eventsource/Support/ROIType"
Attribute to check for ROI Minimum X Coordinate:
"attributes/Eventsource/Limit/ROICoordinate.MinX"
Attribute to check for ROI Maximum X Coordinate:
"attributes/Eventsource/Limit/ROICoordinate.MinY"
Attribute to check for ROI Minimum Y Coordinate:
"attributes/Eventsource/Limit/ROICoordinate.MaxX"
Attribute to check for ROI Maximum Y Coordinate:
"attributes/Eventsource/Limit/ROICoordinate. MaxY"

REQUEST

```
http://<Device IP>/stw-
```

```
cgi/eventsources.cgi?msubmenu=videoanalysis&action=set&DetectionType=MotionD  
etection&ROI.1.Coordinate=380,209,1540,858,540,297,1380,759&ROIMode=Inside
```

2.1.10. Removing all configured lines and ROI in Channel 0

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?msubmenu=videoanalysis&action=remove&Channel=0
```

2.1.11. Removing configured line number 1 in Channel 0

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?msubmenu=videoanalysis&action=remove&Channel=0&LineInde  
x=1
```

2.1.12. Removing a line, area and ROI in Channel 0

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?msubmenu=videoanalysis&action=remove&Channel=0&LineInde  
x=1&DefinedAreaIndex=1,2&ROIIndex=1
```

2.2. Video Analytics2 Setup

2.2.1. Description

The **videoanalysis2** submenu is similar to the **videoanalysis** submenu but this submenu supports the configuration of the parameters for each area/ROI.

NOTE

This chapter applies to the network cameras and encoder only.
Attribute to check for video analytics support: "attributes/Eventsource/Support/
Channel.#.IVRule"
Attribute to check for maximum IV Rules: "attributes/Eventsource/Limit/MaxIVRule"
Attribute to check for motion detection support:
"attributes/Eventsource/Support/VA.MotionDetection"
Camera/Encoder gives adjusted coordinates based on flip/mirror/rotate settings when the
"/attributes/Eventsource/Support/AdjustMDIVRuleOnFlipMirror" parameter is set to False.
Otherwise, camera provides original coordinates and client has to perform coordinate
adjustment based on flip/mirror/rotate settings.

Access level

Action	Camera	Encoder
view	Admin	Admin
set	Admin	Admin
remove	Admin	Admin

2.2.2. Syntax

```
http://<Device IP>/stw-cgi/eventsources.cgi?submenu=
videoanalysis2&action=<value>[&<parameter>=<value>]
```

2.2.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads video analysis settings
	Channel	REQ, RES	<csv>	Channel ID
	DetectionType	REQ	<enum> MotionDetection, IntelligentVideo, Off, MDAndIV	Detection type DetectionType for the view action requests the current video analysis settings and does not change the configured detection type.
set	Channel	REQ, RES	<int>	Channel ID
	DetectionType	REQ, RES	<enum> MotionDetection, IntelligentVideo, Off, MDAndIV	Detection type <ul style="list-style-type: none"> • MotionDetection: Detects motion within the specified area. • IntelligentVideo: Detects objects' appearing, disappearing, entering, exiting, scene changes, etc within the specified area. • Off: No detection. • MDAndIV: Both motion detection and intelligent video functions work together.
	SensitivityLevel	REQ, RES	<int>	Sensitivity level for IntelligentVideo. Sensitivity is valid only when DetectionType is NOT set to Off.

Action	Parameter	Request/ Response	Type/ Value	Description
	DetectionType.#.DetectionResultOverlay	REQ, RES	<bool> True, False	<p>Whether to mark detected motions on the screen in a box when an event occurs</p> <p>DetectionResultOverlay is valid only when DetectionType is NOT set to Off.</p>
	DisplayRules	REQ, RES	<bool> True, False	<p>Whether to show the video analytics on the web client monitoring page</p> <p>DisplayRules is valid only when DetectionType is set to IntelligentVideo.</p>
	DetectionType.#.MinimumObjectSize	REQ, RES	<string>	<p>Minimum size of objects detectable by motion detection.</p> <p>Objects smaller than the specified minimum size is not detected.</p> <p>The size is specified in the format of <width, height>.</p> <p>The value of MinimumObjectSize must be less than the value of MaximumObjectSize.</p> <p>MinimumObjectSize is valid only when DetectionType is NOT set to Off.</p>
	DetectionType.#.MaximumObjectSize	REQ, RES	<string>	<p>Maximum size of objects detectable by motion detection</p> <p>Objects bigger than the maximum size is not detected.</p> <p>The size is specified in the format of <width, height>.</p> <p>The value of MaximumObjectSize must be greater than the value of MinimumObjectSize.</p> <p>MaximumObjectSize is valid only when DetectionType is NOT set to Off.</p>

Action	Parameter	Request/ Response	Type/ Value	Description
	DetectionType.#.MinimumObjectSizeInPixels	REQ, RES	<string>	<p>Minimum object size in pixel</p> <p>The size is specified in the format of <width, height>.</p> <p>MinimumObjectSizeInPixels is valid only when DetectionType is NOT set to Off.</p>
	DetectionType.#.MaximumObjectSizeInPixels	REQ, RES	<string>	<p>Maximum object size in pixel</p> <p>The size is specified in the format of <width, height>.</p> <p>MaximumObjectSizeInPixels is valid only when DetectionType is NOT set to Off.</p>
	DetectionType.#.EnableMetadataInExcludeArea	REQ	<bool> True, False	<p>When this value is false, metadata will not be delivered in exclude region</p> <p>By enabling this parameter, metadata would be generated even for exclude region.</p>
	ROI.#.Coordinate	REQ, RES	<string>	<p>ROI (Region of Interest) coordinates</p> <p>ROI.#.Coordinate is valid only when DetectionType is NOT set to Off.</p>
	ROI.#.Mode	REQ, RES	<enum> Inside, Outside	<p>ROI detection mode</p> <ul style="list-style-type: none"> • Inside: Detects motion within the specified ROI • Outside: Detects motion outside the specified ROI <p>ROI Mode is valid only when DetectionType is NOT set to Off.</p>
	ROI.#.SensitivityLevel	REQ, RES	<int>	Sensitivity level for Motion Detection
	ROI.#.ThresholdLevel	REQ, RES	<int>	Threshold level for Motion Detection
	ROI.#.ObjectTypeFilter	REQ, RES	<csv> Vehicle, Person	This parameter is only supported on models supporting MotionDetection with AI; if this filter is not set, all objects in the defined area would be detected.

Action	Parameter	Request/Response	Type/Value	Description
	ROI.#.RuleName	REQ, RES	<string>	<p>Name of rule</p> <p>This parameter can only be set on models supporting MotionDetection with AI</p>
	DefinedArea.#.Mode	REQ, RES	<csv> AppearDisa ppear, Entering, Exiting, Intrusion, Loitering	<p>Defined virtual area detection mode</p> <ul style="list-style-type: none"> • AppearDisappear: Detects objects appearing or disappearing in the specified virtual area. • Entering: Detects objects entering the specified virtual area. • Exiting: Detects objects exiting the specified virtual area. • Intrusion: Detects objects intruding in the specified virtual area • Loitering: Detects objects remaining in the specified virtual area over a certain period <p>DefinedArea.#.Mode is valid only when DetectionType is set to IntelligentVideo.</p> <div> <p>Note</p> <p>DefinedArea.#.Mode, DefinedArea.#.Coordinate, Line.#.Mode, and Line.#.Coordinate must be sent together with the set action.</p> </div>
	DefinedArea.#.Coordinate	REQ, RES	<string>	<p>Top left and bottom right vertices of the defined virtual area for motion detection</p> <p>DefinedArea.#.Coordinate is valid only when DetectionType is set to IntelligentVideo.</p> <p>DefinedArea.#.Mode must be sent together with DefinedArea.#.Coordinate.</p>

Action	Parameter	Request/ Response	Type/ Value	Description
	DefinedArea.#.Type	REQ, RES	<enum> Inside, Outside	Define Area type <ul style="list-style-type: none"> • Inside: Detects video analytics within the specified area • Outside: Detects video analytics outside the specified area
	DefinedArea.#.AppearanceDuration	REQ, RES	<int>	Appearance Duration in seconds
	DefinedArea.#.LoiteringDuration	REQ, RES	<int>	Loitering Duration in seconds
	DefinedArea.#.IntrusionDuration	REQ, RES	<int>	Intrusion duration in seconds
	DefinedArea.#.RuleName	REQ, RES	<string>	Name of rule This parameter can only be set on models supporting IntelligentVideo with AI
	DefinedArea.#.ObjectTypeFilter	REQ, RES	<csv> Vehicle, Person	This parameter is only supported on models supporting IntelligentVideo with AI; if this filter is not set, all objects in the defined area would be detected.
	DefinedArea.#.ObjectTypeFilterDetails	REQ, RES	<csv> Vehicle.Types.Bicycle, Vehicle.Types.Car, Vehicle.Types.Motorcycle, Vehicle.Types.Bus, Vehicle.Types.Truck, Person.Color.Orange, Person.Color.Black, Person.Color.Red	These parameters indicate the details of the ObjectType top-level object. If none of these details are set, the top-level object will not be detected either.

Action	Parameter	Request/Response	Type/Value	Description
	EntireAreaMode	REQ, RES	<csv> Off, AppearDisa pppear, Scenechang e	<p>Entire area detection mode</p> <ul style="list-style-type: none"> • Off: Disables the entire area detection mode • AppearDisappear: Detects objects appearing or disappearing in the entire area • Scenechange: Detects scene change events, which are triggered when a large portion of the scene is changed. <p>EntireAreaMode is valid only when DetectionType is set to IntelligentVideo.</p> <p>Note Deprecated parameter</p>
	Line.#.Mode	REQ, RES	<csv> Off, Right, Left, BothDirecti ons	<p>Line detection mode</p> <ul style="list-style-type: none"> • Left: Detects motion to the left of the virtual line. • Right: Detects motion to the right of the virtual line. • BothDirections: Detects motion on both sides of line • Off: No event will be detected <p>Line.#.Mode is valid only when DetectionType is set to IntelligentVideo.</p> <p>The Line.#.Mode parameter must be sent along with Line.#.Coordinate.</p>

Action	Parameter	Request/ Response	Type/ Value	Description
	Line.#.Coordinate	REQ, RES	<string>	<p>X and Y coordinates of the two points which define the virtual line</p> <p>The coordinates are specified in the form of <x1,y1,x2,y2>; x1 and y1 are the start points and x2 and y2 are the end points.</p> <p>Line.#.Coordinate is valid only when DetectionType is set to IntelligentVideo.</p> <p>The Line.#.Coordinate parameter must be sent together with Line.#.Mode.</p>
	Line.#.RuleName	REQ, RES	<string>	<p>Name of rule</p> <p>This parameter can only be set on models supporting AI</p>
	Line.#.ObjectTypeFilter	REQ, RES	<csv> Vehicle, Person	<p>This parameter is only supported on models supporting AI; if this filter is not set, all objects crossing the line would be detected.</p>
	Line.#.ObjectTypeFilterDetails	REQ, RES	<csv> Vehicle.Types.Bicycle, Vehicle.Types.Car, Vehicle.Types.Motorcycle, Vehicle.Types.Bus, Vehicle.Types.Truck, Person.Color.Orange, Person.Color.Black, Person.Color.Red	<p>These parameters indicate the details of the ObjectType top-level object. If none of these details are set, the top-level object will not be detected either.</p>
	ROI.#.HandoverIndex	REQ, RES	<int>	<p>Hand Over Index associated with the ROI region</p>

Action	Parameter	Request/ Response	Type/ Value	Description
	DefinedArea.#.Handover Index	REQ, RES	<int>	HandoverIndex associated with the defined area
	Line.#.HandoverIndex	REQ, RES	<int>	HandoverIndex associated with the virtual line
	ROI.#.Duration	REQ, RES	<int>	ROI duration in seconds
	DefinedArea.#.Detection ResultOverlay	REQ, RES	<bool> True, False	Whether to mark detected motions on the screen in a box when an event occurs DetectionResultOverlay is valid only when DetectionType is NOT set to Off.
remove	Channel	REQ	<int>	ID of the channel to be deleted
	LineIndex	REQ	<csv> All, #	Index of the virtual line to be deleted
	DefinedAreaIndex	REQ	<csv> All, #	Index of the virtual area to be deleted
	ROIIndex	REQ	<csv> All, #	Index of the ROI to be deleted

2.2.4. Examples

2.2.5. Getting the current video analytics settings of 'Channel 0'

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?submenu=videoanalysis2&action=view&Channel=0
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "VideoAnalysis": [
    {
      "Channel": 0,
      "DetectionType": "MDAndIV",

```



```

"SensitivityLevel": 80,
"ObjectSizeByDetectionTypes": [
  {
    "DetectionType": "MotionDetection",
    "MinimumObjectSize": "0,0",
    "MaximumObjectSize": "99,99",
    "MinimumObjectSizeInPixels": "48,48",
    "MaximumObjectSizeInPixels": "3840,2160",
    "EnableMetadataInExcludeArea": false
  },
  {
    "DetectionType": "IntelligentVideo",
    "MinimumObjectSize": "4,7",
    "MaximumObjectSize": "50,89",
    "MinimumObjectSizeInPixels": "194,194",
    "MaximumObjectSizeInPixels": "1944,1944",
    "EnableMetadataInExcludeArea": false
  }
],
"ROIs": [
  {
    "ROI": 1,
    "Mode": "Inside",
    "SensitivityLevel": 80,
    "ThresholdLevel": 5,
    "Coordinates": [
      {
        "x": 0,
        "y": 0
      },
      {
        "x": 0,
        "y": 2159
      },
      {
        "x": 3839,
        "y": 2159
      },
      {
        "x": 3839,
        "y": 0
      }
    ]
  }
]

```

```

        }
    ],
    "HandoverIndex": 0,
    "Duration": 0
}
],
"Lines": [
    {
        "Line": 1,
        "Coordinates": [
            {
                "x": 588,
                "y": 454
            },
            {
                "x": 3119,
                "y": 1227
            }
        ],
        "Mode": "Right",
        "HandoverIndex": 0,
        "RuleName": "test1",
        "ObjectTypeFilter": [
            "Person",
            "Vehicle"
        ],
        "ObjectTypeFilterDetails": {
            "Vehicle": {
                "Types": [
                    "Bicycle",
                    "Car",
                    "Motorcycle",
                    "Bus",
                    "Truck"
                ]
            }
        }
    }
],
"DefinedAreas": [
    {

```

```

"DefinedArea": 1,
"Type": "Inside",
"Mode": [
    "AppearDisappear",
    "Entering",
    "Exiting",
    "Intrusion"
],
"Coordinates": [
    {
        "x": 996,
        "y": 412
    },
    {
        "x": 3443,
        "y": 406
    },
    {
        "x": 3347,
        "y": 1749
    },
    {
        "x": 1008,
        "y": 1785
    }
],
"AppearanceDuration": 10,
"LoiteringDuration": 10,
"HandoverIndex": 0,
"IntrusionDuration": 2,
"RuleName": "area1",
"ObjectTypeFilter": [
    "Person",
    "Vehicle"
],
"ObjectTypeFilterDetails": {
    "Vehicle": {
        "Types": [
            "Bicycle",
            "Car",
            "Motorcycle",

```

```

        "Bus",
        "Truck"
    ]
}
}
},
{
    "DefinedArea": 9,
    "Type": "Outside",
    "Mode": [],
    "Coordinates": [
        {
            "x": 714,
            "y": 426
        },
        {
            "x": 714,
            "y": 1769
        },
        {
            "x": 2615,
            "y": 1769
        },
        {
            "x": 2615,
            "y": 426
        }
    ],
    "AppearanceDuration": 1,
    "LoiteringDuration": 1,
    "IntrusionDuration": 0,
    "RuleName": "",
    "ObjectTypeFilter": [],
    "ObjectTypeFilterDetails": {}
},
{
    "DefinedArea": 10,
    "Type": "Outside",
    "Mode": [],
    "Coordinates": [
        {

```

```

        "x": 2999,
        "y": 208
    },
    {
        "x": 2999,
        "y": 1623
    },
    {
        "x": 3425,
        "y": 1623
    },
    {
        "x": 3425,
        "y": 208
    }
],
"AppearanceDuration": 1,
"LoiteringDuration": 1,
"IntrusionDuration": 0,
"RuleName": "",
"ObjectTypeFilter": [],
"ObjectTypeFilterDetails": {}
}
]
}

```

2.3. Audio Analytics Setup

2.3.1. Description

The **audioanalysis** submenu configures the audio analysis settings.

NOTE

This chapter applies to the network cameras only.

Attribute to check for audio analytics support: "attributes/Eventsource/Support/AudioAnalysis"

Access level

Action	Camera
view	Admin

Action	Camera
set	Admin

2.3.2. Syntax

```
http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=
audioanalysis&action=<value> [&<parameter>=<value>]
```

2.3.3. Parameters

Action	Parameter	Request/Response	Type/Value	Description
view				Reads audio analysis settings
	Channel	REQ, RES	<csv>	Channel ID
	ConfigurationToken	RES	<string>	Audio source configuration token
set	Channel	REQ, RES	<int>	Channel ID
	Enable	REQ, RES	<bool> True, False	Enables or disables audio analysis
	SensitivityLevel	REQ, RES	<int>	Sensitivity level for audio analysis Note Deprecated
	ThresholdLevel	REQ, RES	<int>	Threshold level for audio analysis
	NoiseReduction	REQ, RES	<bool> True, False	Enables or disables noise reduction
	SoundType	REQ, RES	<csv> Scream, Gunshot, Explosion, GlassBreak	Types of sounds supported
	HandoverIndex	REQ, RES	<int>	Handoverindex associated with audio analysis.

2.3.4. Examples

2.3.5. Getting the current audio analytics settings of 'Channel 0'

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=audioanalysis&action=view&Channel=0
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "AudioAnalysis": [
    {
      "Channel": 0,
      "Enable": false,
      "NoiseReduction": false,
      "ThresholdLevel": 50,
      "SoundType": [],
      "HandoverIndex": 2,
      "ConfigurationToken": "AudioSourceConfig1"
    }
  ]
}
```

2.3.6. Changing audio analysis configuration

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?submenu=audioanalysis&action=set&Channel=0&Enable=True
&NoiseReduction=True&ThresholdLevel=25&SoundType=Scream,Gunshot
```

2.4. Fog Detection Setup

2.4.1. Description

The **fogdetection** submenu configures the fog detection settings.

NOTE

This chapter applies to the network cameras only.
Attribute to check for feature support: "attributes/Eventsource/Support/FogDetection"

Access level

Action	Camera
view	Admin
set	Admin

2.4.2. Syntax

```
http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=  
fogdetection&action=<value>[&<parameter>=<value>]
```

2.4.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads fog detection settings
	Channel	REQ	<csv>	Channel ID
set	Channel	REQ, RES	<int>	Channel ID
	Enable	REQ, RES	<bool> True, False	Enables or disables fog detection
	AutoDefog	REQ, RES	<bool> True, False	Enables or disables auto defog
	Duration	REQ, RES	<int>	Fog detection duration in seconds
	SensitivityLevel	REQ, RES	<int>	Sensitivity level for fog detection
	ThresholdLevel	REQ, RES	<int>	Threshold level for fog detection

2.4.4. Examples

2.4.5. Getting the settings for Channel 0

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?msubmenu=fogdetection&action=view&Channel=0
```

JSON RESPONSE

```
HTTP/1.0 200 OK  
Content-type: application/json  
<Body>
```

```
{  
  "FogDetection": [  
    {  
      "Channel": 0,  
      "Enable": false,  
      "SensitivityLevel": 35,  
    }  
  ]  
}
```



```

        "ThresholdLevel": 50,
        "AutoDefog": false,
        "Duration": 30
    }
]
}

```

2.4.6. Changing fog detection settings

REQUEST

```

http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=fogdetection&action=set&Channel=0&Enable=True&
SensitivityLevel=10&ThresholdLevel=12&AutoDefog=True&Duration=50

```

2.5. Face Detection Setup

2.5.1. Description

The **facedetection** submenu configures human face detection settings.

NOTE

This chapter applies to the network cameras only.

Attribute to check for feature support: "attributes/Eventsource/Support/ Channel.#. FaceDetection"

Attribute to check for max face detection areas:

"attributes/Eventsource/Limit/MaxFaceDetectionArea"

Camera gives adjusted coordinates based on flip/mirror/rotate settings when "/attributes/Eventsource/Support/AdjustMDIVRuleOnFlipMirror" parameter is set to False. Otherwise, camera provides original coordinates and client has to perform coordinate adjustment based on the flip/mirror/rotate settings.

Access level

Action	Camera
view	Admin
set	Admin
remove	Admin

2.5.2. Syntax

```

http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=
facedetection&action=<value> [&<parameter>=<value>]

```

2.5.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads face detection settings
	Channel	REQ, RES	<csv>	Channel ID
set	Channel	REQ, RES	<int>	Channel ID
	Enable	REQ, RES	<bool> True, False	Whether to use face detection
	Sensitivity	REQ, RES	<int>	Face detection sensitivity level
	OverlayColor	REQ, RES	<enum> Red, Orange, Yellow, Green, Blue, Navy, Violet, Black, White	Color of face detected area line
	MarkDetectedFaces	REQ, RES	<bool> True, False	Whether to mark detected faces on the screen
	DetectionAreaMode	REQ, RES	<enum> Inside, Outside	Face detection area mode <ul style="list-style-type: none"> • Inside: Detects faces within the specified area • Outside: Detects faces outside the specified area
	DetectionArea.#.Mode	REQ, RES	<enum> Inside, Outside	Face detection area mode <ul style="list-style-type: none"> • Inside: Detects faces within the specified area • Outside: Detects faces outside the specified area
	DetectionArea.#.Coordinate	REQ, RES	<string>	Face detection area coordinates <div> Note Please refer to "MaxFaceDetectionArea" in attributes page for settable area count. </div>
	DynamicArea	REQ, RES	<bool>	Enable or disable motion based dynamic area for face detection

Action	Parameter	Request/Response	Type/Value	Description
remove	Channel	REQ	<int>	Channel ID
	DetectionAreaIndex	REQ	<csv> All, #	Index of the detection area to be deleted <div> Note DetectionAreaIndex must be sent together with the remove action. </div>

2.5.4. Examples

2.5.5. Getting the settings for Channel 0

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?submenu=facedetection&action=view&Channel=0
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

```
Channel.0.Enable=False
Channel.0.Sensitivity=5
Channel.0.DynamicArea=True
Channel.0.OverlayColor-Red
Channel.0.MarkDetectedFaces=False
Channel.0.DetectionAreaMode=Inside
Channel.0.DetectionArea.1.Mode=Inside
Channel.0.DetectionArea.1.Coordinate=591,126,276,129,255,372,663,372
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
```

```

"FaceDetection": [
  {
    "Channel": 0,
    "Enable": true,
    "Sensitivity": 5,
    "DynamicArea": true,
    "OverlayColor": "Red",
    "MarkDetectedFaces": false,
    "DetectionAreaMode": "Inside",
    "DetectionAreas": [
      {
        "DetectionArea": 1,
        "Mode": "Inside",
        "Coordinates": [
          {
            "x": 591,
            "y": 126
          },
          {
            "x": 276,
            "y": 129
          },
          {
            "x": 255,
            "y": 372
          },
          {
            "x": 663,
            "y": 372
          }
        ]
      }
    ]
  }
]
}

```

2.5.6. Enabling face detection and setting the sensitivity level to 10

REQUEST

```
http://<Device IP>/stw-
```

```
cgi/eventsources.cgi?msubmenu=facedetection&action=set&Enable=True&Sensitivity=10
```

2.5.7. Enabling motion based dynamic area setting

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?msubmenu=facedetection&action=set&DynamicArea=True
```

2.5.8. Setting the coordinates of detection area index 1

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?msubmenu=facedetection&action=set&Enable=True&Detection  
Area.1.Coordinate=86,154,973,965,513,725,32,992
```

2.5.9. Removing all detection area indexes in all channels

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?msubmenu=facedetection&action=remove&DetectionAreaIndex  
=All
```

2.5.10. Removing all detection area indexes in Channel 0

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?msubmenu=facedetection&action=remove&Channel=0&Detectio  
nAreaIndex=All
```

2.6. Tampering Detection

2.6.1. Description

The **tamperingdetection** submenu configures event detection for scene changes (tampering attempts). It can detect tampering attempts such as a sudden change in the camera's viewing direction, a blocked lens and other overall changes to the scenes on the video.

NOTE

This chapter applies to the network cameras and encoder only.
Attribute to check for feature support:

"attributes/Eventsource/Support/TamperingDetection"

Access level

Action	Camera	Encoder
view	Admin	Admin
set	Admin	Admin

2.6.2. Syntax

```
http://<Device IP>/stw-cgi/eventsources.cgi?submenu=  
tamperingdetection&action=<value>[&<parameter>=<value>]
```

2.6.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads tampering detection settings
	Channel	REQ, RES	<csv>	Channel ID
set	Channel	REQ, RES	<int>	Channel ID
	Enable	REQ, RES	<bool> True, False	Whether to use tampering detection
	Sensitivity	REQ, RES	<enum> VeryLow, Low, Medium, High, VeryHigh	Scene change detection sensitivity level
	DarknessDetection	REQ, RES	<bool> True, False	Enables or disables darkness detection
	Duration	REQ, RES	<int>	Tampering detection duration in seconds
	SensitivityLevel	REQ, RES	<int>	Sensitivity level for tampering
	ThresholdLevel	REQ, RES	<int>	Threshold level for tampering
	HandoverIndex	REQ, RES	<int>	HandOverIndex associated with tampering detection
	RuleName	REQ, RES	<string>	Name of rule
	ChannelIDList	REQ	<csv>	List of channels to be configured

NVR ONLY

2.6.4. Examples

2.6.5. Getting tampering detection settings for Channel 0

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?msubmenu=tamperingdetection&action=view&Channel=0
```

TEXT RESPONSE

```
HTTP/1.0 200 OK  
Content-type: text/plain  
<Body>
```

```
Channel.0.Enable=False  
Channel.0.Sensitivity=Low  
Channel.0.SensitivityLevel=80  
Channel.0.ThresholdLevel=9  
Channel.0.Duration=22  
Channel.0.DarknessDetection=False  
Channel.0.HandoverIndex=1  
Channel.0.RuleName=
```

JSON RESPONSE

```
HTTP/1.0 200 OK  
Content-type: application/json  
<Body>
```

```
{  
  "TamperingDetection": [  
    {  
      "Channel": 0,  
      "Enable": true,  
      "Sensitivity": "High",  
      "SensitivityLevel": 80,  
      "ThresholdLevel": 9,  
      "Duration": 22,  
      "DarknessDetection": false,  
      "HandoverIndex": 1,  
    }  
  ]  
}
```

```

        "RuleName": ""
    }
]
}

```

2.6.6. Setting tampering detection sensitivity level to high

REQUEST

```

http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=tamperingdetection&action=set&Enable=True&Sens
itivity=High

```

2.7. Audio Detection

2.7.1. Description

The **audiodetection** submenu configures audio detection settings.

NOTE

This chapter applies to the network cameras only.

Attribute to check for feature support: "attributes/Eventsource/Support/AudioDetection"

Access level

Action	Camera
view	Admin
set	Admin

2.7.2. Syntax

```

http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=
audiodetection&action=<value>[&<parameter>=<value>]

```

2.7.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads audio detection settings
	Channel	REQ, RES	<int>	Channel ID
set	Channel	REQ, RES	<int>	Channel ID
	Enable	REQ, RES	<bool> True, False	Whether to use audio detection

Action	Parameter	Request/ Response	Type/ Value	Description
	InputThresholdLevel	REQ, RES	<int>	Audio detection input threshold level
check	Channel	REQ, RES	<int>	Channel ID
	MaxSamples	REQ	<int>	Maximum Samples for audio detection
	SequenceID	RES	<int>	Sequence ID
	Level	RES	<int>	Audio level

2.7.4. Examples

2.7.5. Getting audio detection settings for Channel 0

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?msubmenu=audiodetection&action=view&Channel=0
```

TEXT RESPONSE

```
HTTP/1.0 200 OK  
Content-type: text/plain  
<Body>
```

```
Channel.0.Enable=True  
Channel.0.InputThresholdLevel=50
```

JSON RESPONSE

```
HTTP/1.0 200 OK  
Content-type: application/json  
<Body>
```

```
{  
  "AudioDetection": [  
    {  
      "Channel": 0,  
      "Enable": true,  
      "InputThresholdLevel": 50  
    }  
  ]  
}
```

```
]
}
```

2.7.6. Enabling audio detection with an input threshold level of 50

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=audiodetection&action=set&Enable=True&InputThr
esholdLevel=50
```

2.7.7. Checking audio detection level for Channel 0

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=audiodetection&action=check&MaxSamples=5
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

```
Channel.0.SequenceID.18738854.Level=0
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "AudioDetection": [
    {
      "Channel": 0,
      "Samples": [
        {
          "SequenceID": 18738854,
          "Level": 0
        }
      ]
    }
  ]
}
```

```

    ]
  }
]
}

```

2.8. Video Loss

2.8.1. Description

The **videoloss** submenu configures video loss detection settings. The event is triggered when the camera is disconnected.

NOTE

This feature is available for encoder products.

Attribute to check for feature support: "attributes/Eventsource/Support/VideoLoss"

Access level

Action	Encoder
view	Admin
set	Admin

2.8.2. Syntax

```

http://<Device IP>/stw-cgi/eventsources.cgi?submenu=
videoloss&action=<value> [&<parameter>=<value>]

```

2.8.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads video loss detection settings
	Channel	REQ, RES	<csv>	Channel ID
set	Channel	REQ, RES	<int>	Channel ID
	Enable	REQ, RES	<bool> True, False	Whether to use video loss detection

2.8.4. Examples

2.8.5. Getting video loss settings for Channel 0

REQUEST

```

http://<Device IP>/stw-

```

```
cgi/eventsources.cgi?msubmenu=videoloss&action=view&Channel=0
```

TEXT RESPONSE

```
HTTP/1.0 200 OK  
Content-type: text/plain  
<Body>
```

```
Channel.0.Enable=True
```

JSON RESPONSE

```
HTTP/1.0 200 OK  
Content-type: application/json  
<Body>
```

```
{  
  "VideoLoss": [  
    {  
      "Channel": 0,  
      "Enable": true  
    }  
  ]  
}
```

2.8.6. Enabling video loss detection

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?msubmenu=videoloss&action=set&Enable=True
```

2.9. Auto Tracking

2.9.1. Description

The **autotracking** submenu configures auto tracking settings. If the camera supports AI engine, then this submenu supports AI-based tracking, in which case users can choose a specific object type to track.

NOTE

This chapter applies to network cameras only.
Attribute to check for feature support: "attributes/Eventsource/Support/Tracking"

Attribute to check for maximum tracking areas:
"attributes/Eventsource/Limit/MaxTrackingArea"
Attribute to check for supporting AI-based tracking.
"attributes/PTZSupport/Support/AIAutoTracking"

Access level

Action	Camera
view	Admin
set	Admin
control	Admin
add	Admin
remove	Admin

2.9.2. Syntax

```
http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=  
autotracking&action=<value>[&<parameter>=<value>]
```

2.9.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads the auto tracking settings
	Channel	REQ, RES	<csv>	Channel ID
	TrackingAreas	RES	<int>	The number of configured tracking areas
control	Channel	REQ	<int>	Channel ID
	TargetLockOn	REQ	<bool> True, False	Whether to lock the target
	TargetLockCoordinate	REQ	<string>	<p>The coordinates to lock the target</p> <p>The coordinates are specified in the form of <x,y>; x and y are scaled from 1 to 10000.</p> <div>Note TargetLockCoordinate must be sent together with the control action.</div>

Action	Parameter	Request/ Response	Type/ Value	Description
	TrackingArea.#	REQ	<enum> Start, End	Tracking area
	Mode	REQ	<enum> Start, Move	Tracking Area Mode <div> Note When Mode is set to Move, TrackingAreaID parameter should be sent along with Mode. When Mode is set to Start, TrackingCoordinate parameter should be sent along with Mode. </div>
	TrackingAreaID	REQ	<string>	Tracking area ID
	TrackingCoordinate	REQ, RES	<string> <format=x1, y1,x2,y2>	Tracking Coordinate
set	Channel	REQ, RES	<Int>	Channel ID
	Enable	REQ, RES	<bool> True, False	Enables or disables the auto tracking
	CameraHeight	REQ, RES	<enum>	Camera height
	ObjectSize	REQ, RES	<enum> Small, Medium, Large	Size of the object to be tracked
	Sensitivity	REQ, RES	<enum> Low, Medium, High	Auto tracking sensitivity
	ZoomControl	REQ, RES	<enum> Off, OneShot, Continuous	Zoom mode <ul style="list-style-type: none"> • Off: Disables zoom • OneShot: Operates zoom one time when detecting an object • Continuous: Operates zoom continuously
	LostMode	REQ, RES	<enum> Stop, Research, ZoomOut	Action for the remaining tracking duration defined in Auto Release after the tracking object escapes

Action	Parameter	Request/ Response	Type/ Value	Description
	AutoReturn	REQ, RES	<enum> Off, 1s, 2s, 3s, 4s, 5s, 6s, 7s, 8s, 9s, 10s, 20s, 30s, 40s, 50s, 1m, 2m, 3m, 4m, 5m	Time interval to return the camera to the initial position after the Auto Release duration
	AutoRelease	REQ, RES	<enum> Off, 10s, 20s, 30s, 40s, 50s, 1m, 2m, 3m, 4m, 5m	Tracking duration, to continue tracking the object
	DisplayIndicator	REQ, RES	<enum> Off, Rectangle, Pointer, Target	Indicator to surround the object when auto-tracking
	TrackingArea.#.Enable	REQ, RES	<bool> True, False	Enables or disables the corresponding tracking area
	DisplayTrackingArea	REQ, RES	<bool> True, False	Whether to display tracking area
	TrackingAreaEnable	REQ, RES	<bool> True, False	Enables or disables the global setting for tracking areas
	ObjectFilterEnable	REQ, RES	<bool> True, False	Enables or disables the specific object type tracking
	ObjectTypeFilter	REQ, RES	<csv> Person, Vehicle	Object Type to track
add	Channel	REQ, RES	<int>	Channel ID
	TrackingAreaID	REQ, RES	<string>	Tracking area ID <div> Note TrackingAreaID and Coordinate must be sent together with the add action. </div>

Action	Parameter	Request/Response	Type/Value	Description
	Coordinate	REQ, RES	<string>	<p>Coordinates</p> <p>The coordinates are specified in the form of <x1,y1,x2,y2>; x and y are points based on real pixels. Please refer ROICoordinate Min and Max X, Y in attributes to get the actual pixel range that a device supports.</p> <p>Note TrackingAreaID and Coordinate must be sent together with the add action.</p>
remove	Channel	REQ	<Int>	Channel ID
	TrackingAreaID	REQ	<csv>	<p>Tracking area ID</p> <p>Note TrackingAreaID must be sent together with the remove action.</p>

2.9.4. Examples

2.9.5. Getting auto tracking settings for Channel 0

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=autotracking&action=view&Channel=0
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

```
Channel.0.Enable=True
Channel.0.CameraHeight=250cm
Channel.0.ObjectSize=Medium
Channel.0.ZoomControl=On
Channel.0.LostMode=Research
Channel.0.DisplayIndicator=Off
```



```
Channel.0.TrackingAreaEnable=True
Channel.0.TrackingArea.Tracking04.Coordinate=1,1,3840,2160
Channel.0.TrackingArea.Tracking03.Coordinate=1,1,3839,2159
Channel.0.TrackingArea.Tracking02.Coordinate=1000,1500,1500,2000
Channel.0.TrackingAreas=3
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "AutoTracking": [
    {
      "Channel": 0,
      "Enable": true,
      "CameraHeight": "250cm",
      "ObjectSize": "Medium",
      "ZoomControl": "On",
      "LostMode": "Research",
      "DisplayIndicator": "Off",
      "TrackingAreaEnable": true,
      "TrackingAreas": [
        {
          "TrackingArea": "Tracking04",
          "Coordinates": [
            {
              "x": 1,
              "y": 1
            },
            {
              "x": 3840,
              "y": 2160
            }
          ]
        },
        {
          "TrackingArea": "Tracking03",
          "Coordinates": [
            {
```

```

        "x": 1,
        "y": 1
    },
    {
        "x": 3839,
        "y": 2159
    }
]
},
{
    "TrackingArea": "Tracking02",
    "Coordinates": [
        {
            "x": 1000,
            "y": 1500
        },
        {
            "x": 1500,
            "y": 2000
        }
    ]
}
]
}

```

2.9.6. Responses from PTZ models supporting AI Autotracking

JSON RESPONSE

```

HTTP/1.0 200 OK
Content-type: application/json
<Body>

```

```

{
    "AutoTracking": [
        {
            "Channel": 0,
            "Enable": false,
            "CameraHeight": "250cm",

```

```

        "ObjectSize": "Medium",
        "ZoomControl": "On",
        "LostMode": "Research",
        "DisplayIndicator": "Off",
        "TrackingAreaEnable": true,
        "ObjectFilterEnable": true,
        "ObjectTypeFilter": [
            "Person",
            "Vehicle"
        ]
    }
]
}

```

2.9.7. Specifying auto tracking settings

REQUEST

```

http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=autotracking&action=set&Enable=True&CameraHeight=300cm&LostMode=Research

```

2.9.8. Locking the target

REQUEST

```

http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=autotracking&action=control&Channel=0&TargetLockOn=True

```

2.9.9. Tracking area 1

REQUEST

```

http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=autotracking&action=control&Channel=0&TrackingArea.1=Start

```

2.9.10. Configuring tracking areas

REQUEST

```

http://<Device IP>/stw-

```

```
cgi/eventsources.cgi?msubmenu=autotracking&action=add&Channel=0&TrackingAreaID=TA1&Coordinate=1,1,5000,5000
```

TEXT RESPONSE

```
HTTP/1.0 200 OK  
Content-type: text/plain  
<Body>
```

```
OK
```

JSON RESPONSE

```
HTTP/1.0 200 OK  
Content-type: application/json  
<Body>
```

```
{  
  "Response": "Success"  
}
```

2.9.11. Removing tracking areas

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?msubmenu=autotracking&action=remove&Channel=0&TrackingAreaID=TA1
```

2.9.12. Moving to a tracking area

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?msubmenu=autotracking&action=control&Mode=Move&TrackingAreaID=TA1
```

2.9.13. Starting a tracking area

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?msubmenu=autotracking&action=control&Mode=Start&Trackin  
gCoordinate=1884,690,2958,1536
```

TEXT RESPONSE

```
HTTP/1.0 200 OK  
Content-type: text/plain  
<Body>
```

```
Channel.0.TrackingCoordinate=1383,657,2457,1503
```

JSON RESPONSE

```
HTTP/1.0 200 OK  
Content-type: application/json  
<Body>
```

```
{  
  "TrackingArea": [  
    {  
      "Channel": 0,  
      "TrackingCoordinate": [  
        {  
          "x": 1383,  
          "y": 657  
        },  
        {  
          "x": 2457,  
          "y": 1503  
        }  
      ]  
    }  
  ]  
}
```

2.10. Scheduled Events

2.10.1. Description

The **timer** submenu configures the schedule for the timer, which can generate events periodically.

NOTE

This chapter applies to the network cameras and encoder only.
Attribute to check for feature support: "attributes/Eventsource/Support/Timer"

Access level

Action	Camera	Encoder
view	Admin	Admin
set	Admin	Admin

2.10.2. Syntax

```
http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=  
timer&action=<value> [&<parameter>=<value>]
```

2.10.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads the scheduled events settings.
set	Enable	REQ, RES	<bool> True, False	Whether to use automatic scheduled events
	ScheduleInterval	REQ, RES	<enum> 5, 10, 15, 30, 45, 60	Schedule interval in seconds/minutes
	ScheduleIntervalUnit	REQ, RES	<enum> Seconds, Minutes	Schedule interval units

2.10.4. Examples

2.10.5. Getting the event schedule settings

REQUEST

```
http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=timer&action=view
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

```
Enable=False
ScheduleInterval=60
ScheduleIntervalUnit=Seconds
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "Enable": false,
  "ScheduleInterval": "60",
  "ScheduleIntervalUnit": "Seconds"
}
```

2.10.6. Setting the schedule to record video every 5 minutes

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=timer&action=set&ScheduleInterval=5&ScheduleIn
tervalUnit=Minutes
```

2.11. Alarm Input

2.11.1. Description

The **alarminput** submenu sets the alarm input (activated/ deactivated) and the alarm input state.

NOTE

Attribute to check for feature support: "attributes/Eventsource/Support/AlarmInput"
Attribute to check for maximum alarm inputs: "attributes/Eventsource/Limit/MaxAlarmInput"

Access level

Action	Camera	Encoder	NVR
view	Admin	Admin	User
set	Admin	Admin	User

2.11.2. Syntax

```
http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=
alarminput&action=<value> [&<parameter>=<value>]
```

2.11.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads the alarm input settings.
set	AlarmInput.#.Enable	REQ, RES	<bool> True, False	Enables or disables alarm input.
	AlarmInput.#.State	REQ, RES	<enum> NormallyOpen, NormallyClose	Alarm triggering condition <ul style="list-style-type: none"> • NormallyOpen: The alarm input sensor's "open circuit" state is considered normal, and the alarm is triggered if it goes into to a "closed circuit" state. • NormallyClose: The alarm input sensor's "closed circuit" state is considered normal, and the alarm is triggered if it goes into to an "open circuit" state.
	AlarmInput.#.IOPortIndex	RES	<int>	Physical IO Port Index

NOTE | represents the index number of the alarm input.

2.11.4. Examples

2.11.5. Getting the current alarm input setting information

REQUEST

```
http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=alarminput&action=view
```


TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

```
AlarmInput.1.Enable=True
AlarmInput.1.State=NormallyOpen
AlarmInput.1.IOPortIndex=1
AlarmInput.2.Enable=True
AlarmInput.2.State=NormallyOpen
AlarmInput.2.IOPortIndex=2
AlarmInput.3.Enable=True
AlarmInput.3.State=NormallyOpen
AlarmInput.4.IOPortIndex=3
AlarmInput.4.Enable=True
AlarmInput.4.State=NormallyOpen
AlarmInput.4.IOPortIndex=4
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "AlarmInputs": [
    {
      "AlarmInput": 1,
      "Enable": true,
      "State": "NormallyOpen",
      "IOPortIndex": 1
    },
    {
      "AlarmInput": 2,
      "Enable": true,
      "State": "NormallyOpen",
      "IOPortIndex": 2
    },
    {
```

```

        "AlarmInput": 3,
        "Enable": true,
        "State": "NormallyOpen",
        "IOPortIndex": 3
    },
    {
        "AlarmInput": 4,
        "Enable": true,
        "State": "NormallyOpen",
        "IOPortIndex": 4
    }
]
}

```

2.11.6. Setting Alarm Input 1 to 'Enabled'

REQUEST

```

http://<Device IP>/stw-
cgi/eventsources.cgi?submenu=alarminput&action=set&AlarmInput.1.Enable=True

```

2.11.7. Setting the state of Alarm Input 1 to 'NormalOpen'

REQUEST

```

http://<Device IP>/stw-
cgi/eventsources.cgi?submenu=alarminput&action=set&AlarmInput.1.State=NormalOpen

```

2.12. Network Alarm Input

2.12.1. Description

The **networkalarminput** submenu c configures the network alarm input function.

NOTE

This chapter applies to NVR only.

Attribute to check for feature support: "attributes/Eventsource/Support/NetworkAlarmInput"

Attribute to check for max network alarm inputs: "attributes/Eventsource/Limit/MaxNetworkAlarmInput"

Access level

Action	NVR
view	User
set	User

2.12.2. Syntax

```
http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=
networkalarminput&action=<value> [&<parameter>=<value>]
```

2.12.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads the network alarm input settings.
	Channel	REQ	<csv>	Channel ID
set	Channel	REQ, RES	<int>	Channel ID
	Enable	REQ, RES	<bool> True, False	Whether to use the network alarm input event

2.12.4. Examples

2.12.5. Getting network alarm input events on Channel 0

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=networkalarminput&action=view&Channel=0
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

```
Channel.0.Enable=True
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
```

<Body>

```
{
  "NetworkAlarmInputs": [
    {
      "Channel": 0,
      "Enable": true
    }
  ]
}
```

2.12.6. Enabling network alarm input

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=networkalarminput&action=set&Channel=0&Enable=
True
```

2.13. Network Disconnection

2.13.1. Description

The **networkdisconnect** submenu sets the detection of network disconnections (activated/deactivated).

NOTE

This chapter applies to the network cameras only.
Attribute to check for feature support: "attributes/Eventsource/Support/
NetworkDisconnect"

Access level

Action	Camera	Encoder
view	Admin	Admin
set	Admin	Admin

2.13.2. Syntax

```
http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=
networkdisconnect&action=<value> [&<parameter>=<value>]
```

2.13.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads the network disconnection settings.
	Channel	REQ, RES	<int>	Channel ID
set	Channel	REQ, RES	<int>	Channel ID
	Enable	REQ, RES	<bool> True, False	Whether to use the Network Disconnection event

2.13.4. Examples

2.13.5. Getting network disconnection events on Channel 0

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?msubmenu=networkdisconnect&action=view&Channel=0
```

TEXT RESPONSE

```
HTTP/1.0 200 OK  
Content-type: text/plain  
<Body>
```

```
Channel.0.Enable=True
```

JSON RESPONSE

```
HTTP/1.0 200 OK  
Content-type: application/json  
<Body>
```

```
{  
  "NetworkDisconnect": [  
    {  
      "Channel": 0,  
      "Enable": false  
    }  
  ]  
}
```

```
}
```

2.13.6. Enabling network disconnection event

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?submenu=networkdisconnect&action=set&Enable=True
```

2.14. Defocus Detection

2.14.1. Description

The **defocusdetection** submenu configures event detection when the camera is out of focus.

NOTE

This chapter applies to network cameras only.
Attribute to check for feature support:
"attributes/Eventsource/Support/DefocusDetection"

Access level

Action	Camera
view	Admin
set	Admin

2.14.2. Syntax

```
http://<Device IP>/stw-cgi/eventsources.cgi?submenu=  
defocusdetection&action=<value>[&<parameter>=<value>]
```

2.14.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads defocus detection settings
	Channel	REQ, RES	<csv>	Channel ID
set	Channel	REQ, RES	<int>	Channel ID
	Enable	REQ, RES	<bool> True, False	Whether to use defocus detection
	Sensitivity	REQ, RES	<int>	Defocus detection sensitivity level
	Duration	REQ, RES	<int>	Defocus detection duration in seconds

Action	Parameter	Request/ Response	Type/ Value	Description
	ThresholdLevel	REQ, RES	<int>	Threshold level for defocus detection
	AutoSimpleFocus	REQ, RES	<bool> True, False	To enable/disable auto simple focus
	RuleName	REQ, RES	<string>	Name of rule

2.14.4. Examples

2.14.5. Getting defocus detection settings for Channel 0

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=defocusdetection&action=view&Channel=0
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

```
Channel.0.Enable=True
Channel.0.Sensitivity=22
Channel.0.ThresholdLevel=71
Channel.0.Duration=10
Channel.0.AutoSimpleFocus=False
Channel.0.RuleName=
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "DefocusDetection": [
    {
      "Channel": 0,
      "Enable": true,
```

```

        "Sensitivity": 22,
        "ThresholdLevel": 71,
        "Duration": 10,
        "AutoSimpleFocus": false,
        "RuleName": ""
    }
]
}

```

2.14.6. Changing defocus detection settings

REQUEST

```

http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=defocusdetection&action=set&Channel=0&Enable=
True&Sensitivity=75&ThresholdLevel=88&Duration=6&AutoSimpleFocus=True&RuleNam
e=Defocus1

```

2.15. People Count

2.15.1. Description

The **peoplecount** submenu configures people count settings.

NOTE | This chapter applies to network cameras only.

Access level

Action	Camera
view	Admin
set	Admin
check	Admin

2.15.2. Syntax

```

http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=
peoplecount&action=<value> [&<parameter>=<value>]

```

2.15.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads people count settings
	Channel	REQ, RES	<int>	Channel ID
	MasterName	RES	<string>	Master camera name <div> Note Current camera is master camera always. </div>
set	Channel	REQ, RES	<int>	Channel ID
	Enable	REQ, RES	<bool> True, False	Whether to use people count feature
	CalibrationMode	REQ, RES	<enum> CameraHeight, ObjectSize	Calibration mode
	CameraHeight	REQ, RES	<int>	Height at which camera is mounted <div> Note This parameter is valid only when CalibrationMode set to CameraHeight. </div>
	ObjectSizeCoordinates	REQ, RES	<string> Format=x1, y1,x2,y2	Coordinates of detectable Object size <div> Note This parameter is valid only when CalibrationMode set to ObjectSize. </div>
	Line.#.Name	REQ, RES	<string>	Name of the line
	Line.#.Enable	REQ, RES	<bool> True, False	Whether to use the line or not
	Line.#.Mode	REQ, RES	<enum> LeftToRightIn, RightToLeftIn	Line detection mode: <ul style="list-style-type: none"> LeftToRightIn: Detects when person crosses the line from left to right. RightToLeftIn: Detects when person crosses the line from right to left.

Action	Parameter	Request/ Response	Type/ Value	Description
	Line.#.Coordinates	REQ, RES	<string> Format=x1, y1,x2,y2	X and Y coordinates of the two points which define the line The coordinates are specified in the form of <x1,y1,x2,y2>; x1 and y1 are the start points and x2 and y2 are the end points.
	ReportEnable	REQ, RES	<bool> True, False	Whether to use report or not
	ReportFilename	REQ, RES	<string>	File name of the report
	ReportFileType	REQ, RES	<enum> XLSX, TXT	File type of the report
	Area.#.Type	REQ, RES	<enum> Outside	Specifying the area to exclude from analyzing peoplecount
	Area.#.Coordinates	REQ, RES	<string>	Coordinates of area to set The coordinates are specified in the form of < x1,y1,x2,y2>.
remove	Channel	REQ	<int>	Channel ID
	AreaIndex	REQ	<csv>	Area Index
check	Channel	REQ	<int>	Channel ID
	LineIndex	REQ	<int>	Index of the line
	Name	RES	<string>	Line name
	InCount	RES	<int>	Number of people who entered the line
	OutCount	RES	<int>	Number of people who exited the line

2.15.4. Examples

2.15.5. Getting people count settings for Channel 0

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?submenu=peoplecount&action=view&Channel=0
```

TEXT RESPONSE

```
HTTP/1.0 200 OK  
Content-type: text/plain
```

<Body>

```
Channel.0.MasterName=PeopleCount-Master
Channel.0.Enable=True
Channel.0.ReportEnable=True
Channel.0.ReportFilename=peoplecountreport
Channel.0.ReportFileType=XLSX
Channel.0.CalibrationMode=CameraHeight
Channel.0.CameraHeight=300
Channel.0.ObjectSizeCoordinate=1316,1316,1675,1675
Channel.0.Line.1.Name=testline1
Channel.0.Line.1.Enable=True
Channel.0.Line.1.Mode=LeftToRightIn
Channel.0.Line.1.Coordinate=1043,1875,2875,1943
Channel.0.Line.2.Name=testline2
Channel.0.Line.2.Enable=True
Channel.0.Line.2.Mode=LeftToRightIn
Channel.0.Line.2.Coordinate=2912,893,1206,706
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "PeopleCount": [
    {
      "Channel": 0,
      "MasterName": "PeopleCount-Master",
      "Enable": true,
      "ReportEnable": true,
      "ReportFilename": "peoplecountreport",
      "ReportFileType": "XLSX",
      "CalibrationMode": "CameraHeight",
      "CameraHeight": 300,
      "ObjectSizeCoordinate": [
        {
          "x": 1316,
          "y": 1316
```

```

    },
    {
        "x": 1675,
        "y": 1675
    }
],
"Lines": [
    {
        "Line": 1,
        "Mode": "LeftToRightIn",
        "Name": "testline1",
        "Enable": true,
        "Coordinates": [
            {
                "x": 1043,
                "y": 1875
            },
            {
                "x": 2875,
                "y": 1943
            }
        ]
    },
    {
        "Line": 2,
        "Mode": "LeftToRightIn",
        "Name": "testline2",
        "Enable": true,
        "Coordinates": [
            {
                "x": 2912,
                "y": 893
            },
            {
                "x": 1206,
                "y": 706
            }
        ]
    }
]
}

```

```
]
}
```

2.15.6. Setting people count data

Setting up a people count line rule to detect people crossing the line from right to left

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=peoplecount&action=set&Enable=True
&Line.1.Name=testrule1&Line.1.Coordinate=11,12,600,400&Line.1.Mode=RightToLe
ftIn&ObjectSizeInPixels=100,200
```

Setting up a people count report

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=peoplecount&action=set&ReportEnable=True&Repor
tFilename=testreport&ReportFileType=TXT
```

2.15.7. Removing exclude area

To remove an exclude region based on area index

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=peoplecount&action=remove&Channel=0&AreaIndex=
1
```

2.15.8. Reset Peoplecounting DB

Refer to system.cgi **databasereset** submenu.

2.15.9. Getting people count live data

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=peoplecount&action=check
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

```
Channel.0.LineIndex=1
Channel.0.LineIndex.1.Name=testline1
Channel.0.LineIndex.1.InCount=0
Channel.0.LineIndex.1.OutCount=0
Channel.0.LineIndex=2
Channel.0.LineIndex.2.Name=testline2
Channel.0.LineIndex.2.InCount=9
Channel.0.LineIndex.2.OutCount=21
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "PeopleCount": [
    {
      "Lines": [
        {
          "LineIndex": 1,
          "Name": "testline1",
          "InCount": 0,
          "OutCount": 0
        },
        {
          "LineIndex": 2,
          "Name": "testline2",
          "InCount": 9,
          "OutCount": 21
        }
      ]
    }
  ]
}
```

```
}
```

2.16. Heat Map

2.16.1. Description

The **heatmap** submenu configures heat map settings.

NOTE | This chapter applies to network cameras only.

Access level

Action	Camera
view	Admin
set	Admin
check	Admin

2.16.2. Syntax

```
http://<Device IP>/stw-cgi/eventsources.cgi?submenu=  
heatmap&action=<value>[&<parameter>=<value>]
```

2.16.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads heat map settings
	Channel	REQ, RES	<int>	Channel ID
	AutoReference	RES	<int>	Automatically detected heatmap reference values
set	Channel	REQ, RES	<int>	Channel ID
	Enable	REQ, RES	<bool> True, False	Whether to use heat map feature
	ReportEnable	REQ, RES	<bool> True, False	Whether to use report or not
	ReportFilename	REQ, RES	<string>	File name of the report
	ReportFileType	REQ, RES	<enum> PNG	File type of the report

Action	Parameter	Request/ Response	Type/ Value	Description
	BackgroundColourLevel	REQ, RES	<int>	Background color adjustment The values should be in the range of 0 to 100; <ul style="list-style-type: none"> • 0: Black and White • 100: Color Image
	Area.#.Type	REQ, RES	<enum> Outside	Specifying the area to exclude from analyzing heatmap
	Area.#.Coordinates	REQ, RES	<string>	Coordinates of Area to set The coordinates are specified in the form of < x1,y1,x2,y2...>.
	ManualModeEnable	REQ, RES	<bool> True, False	Whether to use heatmap in manual reference mode
	ManualReference	REQ, RES	<int>	Manual heatmap reference values
remove	Channel	REQ	<int>	Channel ID
	AreaIndex	REQ	<csv>	Area index
check	Channel	REQ, RES	<int>	Channel ID
	Descriptor	RES	<int>	Heat map level descriptor
	Level	RES	<csv>	Heat map Level
	Resolution	RES	<string>	Heat map image resolution

2.16.4. Examples

2.16.5. Getting heat map settings for Channel 0

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?submenu=heatmap&action=view&Channel=0
```

TEXT RESPONSE

```
HTTP/1.0 200 OK  
Content-type: text/plain  
<Body>
```

```
Channel.0.Enable=True
```



```
Channel.0.ReportEnable=True
Channel.0.ReportFilename=heatmapreport
Channel.0.ReportFileType=PNG
Channel.0.ManualModeEnable=False
Channel.0.ManualReference=0
Channel.0.AutoReference=213485
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "HeatMap": [
    {
      "Channel": 0,
      "Enable": true,
      "ReportEnable": true,
      "ReportFilename": "heatmapreport",
      "ReportFileType": "PNG",
      "ManualModeEnable": false,
      "ManualReference": 0,
      "AutoReference": 213485
    }
  ]
}
```

2.16.6. Setting heat map data

Enabling the heatmap feature

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?submenu=heatmap&action=set&Enable=True
```

Setting up the heatmap report

REQUEST

```
http://<Device IP>/stw-
```

```
cgi/eventsources.cgi?msubmenu=heatmap&action=set&ReportEnable=True&ReportFile  
ename=testreport&ReportFileType=PNG
```

2.16.7. Setting up heatmap in manual reference mode

REQUEST

http://<Device IP>/stw-cgi/eventsources.cgi?submenu=heatmap&action=set
&ManualModeEnable=True&ManualReference=1000

2.16.8. Removing heatmap data

Setting up a people count line rule to detect people crossing the line from right to left

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?submenu=heatmap&action=remove&Channel=0&AreaIndex=1
```

2.16.9. Check the heat map levels

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?msubmenu=heatmap&action=check&Channel=0
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

[illegible]

,2392,2204,2802,3137,0,377
2,1873,2180,1562,881,977,1029,902,822,988,1021,969,1024,1515,2582,5865,0,0,0
,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,3619,4269,2990,770,984,1021,1059,1010
,1031,917,856,953,1085,1253,1222,1193,920,968,2155,4077,0,0,0,0,0,0,0,0,0,0,
0,0,0,0,0,0,0,0,0,0,2544,2236,1400,1075,1217,1466,1380,1272,1019,922,781,678,8
11,1026,1184,1399,1427,1265,1151,1030,1096,1729,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,0,2330,2334,1334,1199,1268,1438,1575,1469,1205,778,672,539,478,540,778,1
010,1105,1191,1284,1345,1296,1106,1146,1711,0,0,0,0,0,0,0,0,0,0,0,0,0,11
42,1343,1209,1107,1105,1129,1158,1211,1039,799,564,476,407,412,476,544,710,9
25,1008,1087,1252,1339,1267,950,876,1447,0,0,0,0,0,0,0,0,0,0,0,0,1359,870,
873,808,787,804,745,750,770,685,548,430,379,327,318,350,402,572,708,788,763,
972,1024,919,683,402,554,1510,0,0,0,0,0,0,0,0,0,0,0,0,2214,1036,574,420,409,40
9,436,541,621,548,419,363,283,224,200,270,264,293,364,534,596,701,695,683,56
6,366,276,317,688,1719,0,0,0,0,0,0,0,0,0,0,3477,2420,586,281,240,280,251,299,3
65,468,456,335,237,173,133,125,158,169,185,236,432,505,586,590,497,251,195,2
13,210,383,954,2797,0,0,0,0,0,0,0,0,0,0,3627,1613,306,216,250,252,254,199,256,31
9,302,283,203,165,122,127,136,149,144,187,250,313,420,489,411,237,184,152,16
7,235,507,1396,0,0,0,0,0,0,0,0,2634,2535,509,280,214,234,272,270,163,151,210,2
21,230,189,161,136,134,167,147,146,197,193,205,224,313,273,195,159,152,151,1
94,318,740,2351,0,0,0,0,0,0,0,1366,870,383,290,197,230,232,209,159,206,168,159
,165,162,143,156,188,180,163,139,177,209,182,142,183,189,190,154,133,113,131
,211,536,1744,0,0,0,0,0,0,639,648,445,307,272,174,175,216,175,199,188,210,175,
151,157,137,143,182,175,149,126,180,197,194,148,136,147,159,141,113,111,133,
231,442,1313,2323,0,0,0,0,502,461,324,262,219,188,225,223,170,188,206,200,16
9,154,158,141,144,178,154,132,116,183,193,189,146,138,151,144,122,116,127,23
9,335,447,1164,2417,0,0,0,0,407,407,281,210,197,295,489,399,162,144,144,156,
158,159,153,146,153,167,175,156,133,149,153,152,319,309,189,138,120,108,112,
250,352,419,932,2323,0,0,0,0,327,328,259,223,203,378,514,488,234,153,154,165
,163,158,164,159,168,183,199,169,152,122,130,177,314,338,240,148,120,103,120
,179,272,316,662,1999,0,0,0,0,314,329,228,179,192,277,539,457,221,185,192,20
4,206,206,200,192,205,252,277,214,182,143,142,139,291,328,179,143,115,107,12
2,148,224,272,497,1796,0,0,0,0,318,278,192,168,192,213,276,251,281,298,313,2
42,242,241,240,219,293,575,706,554,344,225,205,209,226,476,591,252,143,130,1
23,136,173,235,451,1730,0,0,0,344,425,250,201,170,178,204,220,262,277,282,27
8,216,223,219,226,223,278,623,716,592,370,229,219,229,214,601,574,551,180,14
1,134,127,172,260,473,1796,2291,0,0,0,396,298,226,183,159,185,214,232,211,23
1,156,138,144,158,156,168,188,302,469,352,249,172,164,183,163,428,541,450,17
4,146,136,141,195,278,530,1949,0,0,0,0,371,302,205,184,139,161,182,209,184,1
80,143,139,138,131,149,152,163,195,199,185,152,147,149,157,141,197,230,245,1
70,147,147,162,220,319,633,2189,0,0,0,0,495,435,221,153,132,168,178,206,169,
148,153,142,137,127,132,144,151,164,172,148,142,142,153,152,163,195,211,230,

[illegible]

NOTE

This chapter applies to network cameras and encoder only.

Access level

Action	Camera	Encoder
view	Admin	Admin

2.17.2. Syntax

```
http://<Device IP>/stw-cgi/eventsources.cgi?submenu=  
sourceoptions&action=<value>[&<parameter>=<value>]
```

2.17.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view	EventSource	RES	<enum> AlarmInput.#, MotionDetection, VideoLoss,NetworkEv ent, FaceDetection, TamperingDetection, AudioDetection, Tracking, Timer, OpenSDK, UserInput, DefocusDetection QueueManagement, PeopleCount, HeatMap, ShockDetection, TemperatureChanged etection, BoxTemperatureDete ction, ObjectDetection, BodyTemperatureDet ection, MaskDetection, SocialDistancingViolat ion, CallRequest, TamperingSwitch, DTMFReceived, ProximitySensor, ParkingDetection	Source of the event

Action	Parameter	Request/ Response	Type/ Value	Description
	EventAction	RES	<csv> AlarmOutput, SMTP, FTP, Record, HTTP, GoToPreset, AudioClip	Action trigger when an event is raised
	MinimumObjectSize	RES	<string> Format=w,h	<p>Minimum size of objects detectable by motion detection.</p> <p>Objects smaller than the specified minimum size are not detected.</p> <p>The size is specified in the format of <width, height>.</p> <p>The value of MinimumObjectSize must be less than the value of MaximumObjectSize.</p> <p>MinimumObjectSize is valid only when DetectionType is NOT set to Off.</p>
	MaximumObjectSize	RES	<string> Format=w,h	<p>Maximum size of objects detectable by motion detection</p> <p>Objects bigger than the maximum size are not detected.</p> <p>The size is specified in the format of <width, height>.</p> <p>The value of MaximumObjectSize must be greater than the value of MinimumObjectSize.</p> <p>MaximumObjectSize is valid only when DetectionType is NOT set to Off.</p>
	MinimumObjectSizeIn Pixels	RES	<string> Format=w,h	<p>Minimum object size in pixels</p> <p>The size is specified in the format of <width, height>.</p> <p>MinimumObjectSizeInPixels is valid only when DetectionType is NOT set to Off.</p>

Action	Parameter	Request/ Response	Type/ Value	Description
	MaximumObjectSizeInPixels	RES	<string> Format=w,h	<p>Maximum object size in pixels</p> <p>The size is specified in the format of <width, height>.</p> <p>MaximumObjectSizeInPixels is valid only when DetectionType is NOT set to Off.</p>
	ROIIncludeMinIndex	RES	<int>	ROI Include area minimum index number
	ROIIncludeMaxIndex	RES	<int>	ROI Include area maximum index number
	ROIExcludeMinIndex	RES	<int>	ROI Exclude area minimum index number
	ROIExcludeMaxIndex	RES	<int>	ROI Exclude area maximum index number
	ExcludeAreaMinIndex	RES	<int>	Exclude area minimum index
	ExcludeAreaMaxIndex	RES	<int>	Exclude area maximum index
	DefinedAreaIncludeMinIndex	RES	<int>	Defined Include Area minimum index number
	DefinedAreaIncludeMaxIndex	RES	<int>	Defined Include Area maximum index number
	DefinedAreaExcludeMinIndex	RES	<int>	Defined Exclude Area minimum index number
	DefinedAreaExcludeMaxIndex	RES	<int>	Defined Exclude Area maximum index number
	DetectionAreaIncludeMinIndex	RES	<int>	Minimum index number of include detection area
	DetectionAreaIncludeMaxIndex	RES	<int>	Maximum index number of include detection area
	DetectionAreaExcludeMinIndex	RES	<int>	Minimum index number of exclude detection area
	DetectionAreaExcludeMaxIndex	RES	<int>	Maximum index number of exclude detection area

Action	Parameter	Request/ Response	Type/ Value	Description
	MinimumAreaSizeInPixels	RES	<string>	Minimum area size in pixels When EventSource is FaceDetection. Format=w,h
	MinimumAllowedDistanceStepSize	RES	<float>	In SocialDistancingViolation EventSource, it shows the minimum distance step size setting.
	ObjectTypeFilter	RES	<csv> Person, Vehicle	List of object types available in IVA among all object types
	ObjectTypeFilterDetails	RES	<csv> Vehicle.Types.Bicycle, Vehicle.Types.Car, Vehicle.Types.Motorcycle, Vehicle.Types.Bus, Vehicle.Types.Truck, Person.Color.Orange, Person.Color.Black, Person.Color.Red	List of detailed object types available in IVA
	ObjectTypes	RES	<csv> Person, Vehicle, Face, LicensePlate	List of object types available in ObjectDetection among all object types
	ObjectTypeDetails	RES	<csv> Vehicle.Types.Bicycle, Vehicle.Types.Car, Vehicle.Types.Motorcycle, Vehicle.Types.Bus, Vehicle.Types.Truck, Person.Color.Orange, Person.Color.Black, Person.Color.Red	List of detailed object types available in ObjectDetection

2.17.4. Examples

2.17.5. Getting source options

REQUEST

```
http://<Device IP>/ /stw-  
cgi/eventsources.cgi?msubmenu=sourceoptions&action=view
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

```
EventSource.AlarmInput.1.EventAction=FTP,SMTP,Record,AlarmOutput,AudioClip
EventSource.MotionDetection.EventAction=FTP,SMTP,Record,AlarmOutput,AudioClip
EventSource.MotionDetection.MinimumObjectSize=0,0
EventSource.MotionDetection.MaximumObjectSize=99,99
EventSource.MotionDetection.MinimumObjectSizeInPixels=41,41
EventSource.MotionDetection.MaximumObjectSizeInPixels=3328,1872
EventSource.MotionDetection.ROIIncludeMinIndex=1
EventSource.MotionDetection.ROIIncludeMaxIndex=8
EventSource.MotionDetection.ROIExcludeMinIndex=9
EventSource.MotionDetection.ROIExcludeMaxIndex=16
EventSource.VideoAnalysis.EventAction=FTP,SMTP,Record,AlarmOutput,AudioClip
EventSource.VideoAnalysis.MinimumObjectSize=0,0
EventSource.VideoAnalysis.MaximumObjectSize=99,99
EventSource.VideoAnalysis.MinimumObjectSizeInPixels=41,41
EventSource.VideoAnalysis.MaximumObjectSizeInPixels=3328,1872
EventSource.VideoAnalysis.DefinedAreaIncludeMinIndex=1
EventSource.VideoAnalysis.DefinedAreaIncludeMaxIndex=8
EventSource.VideoAnalysis.DefinedAreaExcludeMinIndex=9
EventSource.VideoAnalysis.DefinedAreaExcludeMaxIndex=16
EventSource.VideoAnalysis.ObjectTypeFilter=Person,Vehicle
EventSource.VideoAnalysis.ObjectTypeFilterDetails=Vehicle.Types.Bicycle,Vehicle.Types.Car,Vehicle.Types.Motorcycle,Vehicle.Types.Bus,Vehicle.Types.Truck
EventSource.NetworkEvent.EventAction=Record,AlarmOutput
EventSource.FaceDetection.EventAction=FTP,SMTP,Record,AlarmOutput,AudioClip
EventSource.FaceDetection.MinimumAreaSizeInPixels=960,540
EventSource.FaceDetection.DetectionAreaIncludeMinIndex=1
EventSource.FaceDetection.DetectionAreaIncludeMaxIndex=1
EventSource.FaceDetection.DetectionAreaExcludeMinIndex=2
EventSource.FaceDetection.DetectionAreaExcludeMaxIndex=9
EventSource.TamperingDetection.EventAction=FTP,SMTP,Record,AlarmOutput,AudioClip
EventSource.DefocusDetection.EventAction=FTP,SMTP,Record,AlarmOutput,AudioClip
EventSource.FogDetection.EventAction=FTP,SMTP,Record,AlarmOutput,AudioClip
```

```

EventSource.AudioDetection.EventAction=FTP,SMTP,Record,AlarmOutput
EventSource.AudioAnalysis.EventAction=FTP,SMTP,Record,AlarmOutput
EventSource.OpenSDK.EventAction=FTP,SMTP
EventSource.Timer.EventAction=FTP
EventSource.QueueManagement.EventAction=FTP,SMTP,AlarmOutput,AudioClip
EventSource.ShockDetection.EventAction=FTP,SMTP,Record,AlarmOutput,AudioClip
EventSource.PeopleCount.EventAction=
EventSource.SocialDistancingViolation.EventAction=FTP,SMTP,Record,AlarmOutput,GoToPreset,AudioClip
EventSource.SocialDistancingViolation.MinimumAllowedDistanceStepSize=0.5
EventSource.SocialDistancingViolation.MinimumObjectSize=0,0
EventSource.SocialDistancingViolation.MaximumObjectSize=99,99
EventSource.SocialDistancingViolation.MinimumObjectSizeInPixels=12,12
EventSource.SocialDistancingViolation.MaximumObjectSizeInPixels=3840,2160
EventSource.SocialDistancingViolation.ExcludeAreaMinIndex=1
EventSource.SocialDistancingViolation.ExcludeAreaMaxIndex=
EventSource.ObjectDetection.EventAction=FTP,SMTP,Record,AlarmOutput
EventSource.ObjectDetection.MinimumObjectSize=0,0
EventSource.ObjectDetection.MaximumObjectSize=99,99
EventSource.ObjectDetection.MinimumObjectSizeInPixels=12,12
EventSource.ObjectDetection.MaximumObjectSizeInPixels=3840,2160
EventSource.ObjectDetection.ExcludeAreaMinIndex=1
EventSource.ObjectDetection.ExcludeAreaMaxIndex=8
EventSource.ObjectDetection.ObjectTypes=Person,Vehicle,Face,LicensePlate
EventSource.ObjectDetection.ObjectTypeDetails=Vehicle.Types.Bicycle,Vehicle.Types.Car,Vehicle.Types.Motorcycle,Vehicle.Types.Bus,Vehicle.Types.Truck

```

JSON RESPONSE

```

HTTP/1.0 200 OK
Content-type: application/json
<Body>

```

```

{
  "EventSources": [
    {
      "EventSource": "AlarmInput.1",
      "EventAction": [
        "FTP",
        "SMTP",
        "Record",

```

```

        "AlarmOutput",
        "AudioClip"
    ]
},
{
    "EventSource": "MotionDetection",
    "EventAction": [
        "FTP",
        "SMTP",
        "Record",
        "AlarmOutput",
        "AudioClip"
    ],
    "MinimumObjectSize": {
        "Width": 0,
        "Height": 0
    },
    "MaximumObjectSize": {
        "Width": 99,
        "Height": 99
    },
    "MinimumObjectSizeInPixels": {
        "Width": 41,
        "Height": 41
    },
    "MaximumObjectSizeInPixels": {
        "Width": 3328,
        "Height": 1872
    },
    "ROIIncludeMinIndex": 1,
    "ROIIncludeMaxIndex": 8,
    "ROIExcludeMinIndex": 9,
    "ROIExcludeMaxIndex": 16
},
{
    "EventSource": "VideoAnalysis",
    "EventAction": [
        "FTP",
        "SMTP",
        "Record",
        "AlarmOutput",

```

```

        "AudioClip"
    ],
    "MinimumObjectSize": {
        "Width": 0,
        "Height": 0
    },
    "MaximumObjectSize": {
        "Width": 99,
        "Height": 99
    },
    "MinimumObjectSizeInPixels": {
        "Width": 41,
        "Height": 41
    },
    "MaximumObjectSizeInPixels": {
        "Width": 3328,
        "Height": 1872
    },
    "DefinedAreaIncludeMinIndex": 1,
    "DefinedAreaIncludeMaxIndex": 8,
    "DefinedAreaExcludeMinIndex": 9,
    "DefinedAreaExcludeMaxIndex": 16,
    "ObjectTypeFilter": [
        "Person",
        "Vehicle"
    ],
    "ObjectTypeFilterDetails": {
        "Vehicle": {
            "Types": [
                "Bicycle",
                "Car",
                "Motorcycle",
                "Bus",
                "Truck"
            ]
        }
    }
},
{
    "EventSource": "NetworkEvent",
    "EventAction": [

```

```

        "Record",
        "AlarmOutput"
    ]
},
{
    "EventSource": "FaceDetection",
    "EventAction": [
        "FTP",
        "SMTP",
        "Record",
        "AlarmOutput",
        "AudioClip"
    ],
    "MinimumAreaSizeInPixels": {
        "Width": 960,
        "Height": 540
    },
    "DetectionAreaIncludeMinIndex": 1,
    "DetectionAreaIncludeMaxIndex": 1,
    "DetectionAreaExcludeMaxIndex": 9
},
{
    "EventSource": "TamperingDetection",
    "EventAction": [
        "FTP",
        "SMTP",
        "Record",
        "AlarmOutput",
        "AudioClip"
    ]
},
{
    "EventSource": "DefocusDetection",
    "EventAction": [
        "FTP",
        "SMTP",
        "Record",
        "AlarmOutput",
        "AudioClip"
    ]
},

```

```

{
  "EventSource": "FogDetection",
  "EventAction": [
    "FTP",
    "SMTP",
    "Record",
    "AlarmOutput",
    "AudioClip"
  ]
},
{
  "EventSource": "AudioDetection",
  "EventAction": [
    "FTP",
    "SMTP",
    "Record",
    "AlarmOutput"
  ]
},
{
  "EventSource": "AudioAnalysis",
  "EventAction": [
    "FTP",
    "SMTP",
    "Record",
    "AlarmOutput"
  ]
},
{
  "EventSource": "OpenSDK",
  "EventAction": [
    "FTP",
    "SMTP"
  ]
},
{
  "EventSource": "Timer",
  "EventAction": [
    "FTP"
  ]
},

```



```

{
  "EventSource": "QueueManagement",
  "EventAction": [
    "FTP",
    "SMTP",
    "AlarmOutput",
    "AudioClip"
  ]
},
{
  "EventSource": "ShockDetection",
  "EventAction": [
    "FTP",
    "SMTP",
    "Record",
    "AlarmOutput",
    "AudioClip"
  ]
},
{
  "EventSource": "PeopleCount",
  "EventAction": []
},
{
  "EventSource": "SocialDistancingViolation",
  "EventAction": [
    "FTP",
    "SMTP",
    "Record",
    "AlarmOutput",
    "GoToPreset",
    "AudioClip"
  ],
  "MinimumAllowedDistanceStepSize": 0.5,
  "MinimumObjectSize": {
    "Width": 0,
    "Height": 0
  },
  "MaximumObjectSize": {
    "Width": 99,
    "Height": 99
  }
}

```

```

    },
    "MinimumObjectSizeInPixels": {
        "Width": 12,
        "Height": 12
    },
    "MaximumObjectSizeInPixels": {
        "Width": 3840,
        "Height": 2160
    },
    "ExcludeAreaMinIndex": 1,
    "ExcludeAreaMaxIndex": 8
},
{
    "EventSource": "ObjectDetection",
    "EventAction": [
        "FTP",
        "SMTP",
        "Record",
        "AlarmOutput"
    ],
    "MinimumObjectSize": {
        "Width": 0,
        "Height": 0
    },
    "MaximumObjectSize": {
        "Width": 99,
        "Height": 99
    },
    "MinimumObjectSizeInPixels": {
        "Width": 12,
        "Height": 12
    },
    "MaximumObjectSizeInPixels": {
        "Width": 3840,
        "Height": 2160
    },
    "ExcludeAreaMinIndex": 1,
    "ExcludeAreaMaxIndex": 8,
    "ObjectTypes": [
        "Person",
        "Vehicle",

```

```

        "Face",
        "LicensePlate"
    ],
    "ObjectTypeDetails": {
        "Vehicle": {
            "Types": [
                "Bicycle",
                "Car",
                "Motorcycle",
                "Bus",
                "Truck"
            ]
        }
    }
}
]
}

```

2.18. Samples

2.18.1. Description

The **samples** submenu gives the current level of the event for the requested event source.

NOTE | This chapter applies to network cameras & encoder only.

Access level

Action	Camera	Encoder
check	Admin	Admin

2.18.2. Syntax

```

http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=
samples&action=<value>[&<parameter>=<value>]

```

2.18.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
check	Channel	REQ, RES	<int>	Channel ID

Action	Parameter	Request/ Response	Type/ Value	Description
	EventSourceType	REQ, RES	<enum> MotionDetection, TamperingDetection, AudioDetection, FogDetection, DefocusDetection, AudioAnalysis, ShockDetection	Source of the event
	Index	REQ	<int>	Area/ROI index
	MaxSamples	REQ	<int>	Maximum samples required
	SequenceID	RES	<int>	Sequence ID for the sample
	Level	RES	<int>	Event level

2.18.4. Examples

2.18.5. Getting samples for MotionDetection

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?submenu=samples&action=check&EventSourceType=MotionDet  
ection&MaxSamples=5&Channel=0&Index=1
```

JSON RESPONSE

```
HTTP/1.0 200 OK  
Content-type: application/json  
<Body>
```

```
{  
  "MotionDetection": [  
    {  
      "Channel": 0,  
      "Samples": [  
        {  
          "SequenceID": 600718837,  
          "Level": 0  
        },  
        {  
          "SequenceID": 600718738,
```

```

        "Level": 0
      },
      {
        "SequenceID": 600718636,
        "Level": 0
      },
      {
        "SequenceID": 600718531,
        "Level": 0
      },
      {
        "SequenceID": 600718427,
        "Level": 0
      }
    ]
  }
]
}

```

2.19. Queue Management Setup

2.19.1. Description

The **queuemanagementsetup** submenu configures Queue Management settings.

NOTE | This chapter applies to network cameras only.

Access level

Action	Camera
view	Admin
set	Admin
check	Admin

2.19.2. Syntax

```

http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=
queuemanagementsetup&action=<value> [&<parameter>=<value>]

```

2.19.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads queue management settings
	Channel	REQ, RES	<int>	Channel ID
	Queue.#.Level	REQ, RES	<enum> High, Medium	Level of the queue
set	Channel	REQ, RES	<int>	Channel ID
	Enable	REQ, RES	<bool> True, False	Whether to use queue management feature
	ReportEnable	REQ, RES	<bool> True, False	Whether to use report
	ReportFilename	REQ, RES	<string>	Filename of the report
	ReportFileType	REQ, RES	<enum> XLSX,TXT	File type of the report
	Queue.#.Name	REQ, RES	<string>	Name of the queue
	Queue.#.Enable	REQ, RES	<bool> True, False	Whether to use the queue
	Queue.#.Coordinates	REQ, RES	<string> Format=x1, y1,x2,y2,x3, y3,x4,y4...x8 ,y8	X and Y coordinates of the points which define the two lines of the queue. There should be even number of points eg: x1,y1,x2,y2,x3,y3,x4,y4 Where first two points represents the first line and the remaining two points represents the second line of a queue.
	Queue.#.MaxPeople	REQ, RES	<int>	Setting the max number of people for the queue
	Queue.#.Level.High.Count	REQ, RES	<int>	Setting "High boundary value". It should be less than Max value. And Queue.#.Level.Medium.Count value is automatically set as half of "high value".
	Queue.#.Level.#.AlarmEnable	REQ, RES	<bool> True, False	Enabling or disabling alarm if queue reaches a certain threshold
	Queue.#.Level.#.Threshold	REQ, RES	<int>	Threshold to trigger queue's level
check	Channel	REQ	<int>	Channel ID

Action	Parameter	Request/Response	Type/Value	Description
	QueueIndex	REQ	<csv>	QueueIndex list comma separated
	Queue.#.Count	RES	<int>	Current count in the queue.

2.19.4. Examples

2.19.5. Getting queue management settings for Channel 0

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=queuemanagementsetup&action=view
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "QueueManagementSetup": [
    {
      "Channel": 0,
      "Enable": false,
      "ReportEnable": false,
      "ReportFilename": "",
      "ReportFileType": "XLSX",
      "Queues": [
        {
          "Queue": 1,
          "MaxPeople": 32,
          "Name": "",
          "Enable": false,
          "Coordinates": [
            {
              "x": 468,
              "y": 258
            },
            {
              "x": 468,
```

```

        "y": 798
      },
      {
        "x": 1428,
        "y": 798
      },
      {
        "x": 1428,
        "y": 258
      }
    ],
    "QueueLevels": [
      {
        "Level": "High",
        "Count": 16,
        "AlarmEnable": false,
        "Threshold": 60
      },
      {
        "Level": "Medium",
        "Count": 8,
        "AlarmEnable": false,
        "Threshold": 60
      }
    ]
  },
  {
    "Queue": 2,
    "MaxPeople": 32,
    "Name": "",
    "Enable": false,
    "Coordinates": [
      {
        "x": 480,
        "y": 270
      },
      {
        "x": 480,
        "y": 810
      }
    ]
  }

```



```

        "x": 1440,
        "y": 810
    },
    {
        "x": 1440,
        "y": 270
    }
],
"QueueLevels": [
    {
        "Level": "High",
        "Count": 16,
        "AlarmEnable": false,
        "Threshold": 60
    },
    {
        "Level": "Medium",
        "Count": 8,
        "AlarmEnable": false,
        "Threshold": 60
    }
]
},
{
    "Queue": 3,
    "MaxPeople": 32,
    "Name": "",
    "Enable": false,
    "Coordinates": [
        {
            "x": 492,
            "y": 282
        },
        {
            "x": 492,
            "y": 822
        },
        {
            "x": 1452,
            "y": 822
        },
    ],

```

```

        {
            "x": 1452,
            "y": 282
        }
    ],
    "QueueLevels": [
        {
            "Level": "High",
            "Count": 16,
            "AlarmEnable": false,
            "Threshold": 60
        },
        {
            "Level": "Medium",
            "Count": 8,
            "AlarmEnable": false,
            "Threshold": 60
        }
    ]
}

```

2.19.6. Setting queue management data

Setting up a queue management rule to detect the number of people in the queue

REQUEST

```

http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=queuemanagementsetup&action=set&Channel=0&Enable=True&Queue.1.Enable=True&Queue.1.MaxPeople=32&Queue.1.Name=queue1&Queue.1.Level.High.AlarmEnable=False&Queue.1.Level.High.Count=16&Queue.1.Level.High.Threshold=60&Queue.1.Level.Medium.AlarmEnable=False&Queue.1.Level.Medium.Threshold=60&Queue.1.Coordinates=468,258,468,797,1424,866,1427,258

```

Setting up a queue management report

REQUEST

```

http://<Device IP>/stw-

```

```
cgi/eventsources.cgi?msubmenu=queuemanagementsetup&action=set&ReportEnable=Tr
ue&ReportFilename=queue1&ReportFileType=XLSX
```

2.19.7. Getting queue management live count data

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=queuemanagementsetup&action=check&Channel=0&Qu
eueIndex=1
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "QueueCount": [
    {
      "Channel": 0,
      "Queues": [
        {
          "Queue": 0,
          "Count": 4
        }
      ]
    }
  ]
}
```

2.20. G Sensor Setup

2.20.1. Description

The **gsensor** submenu configures G Sensor settings.

NOTE | This chapter applies to NVR only.

Access level

Action	NVR
view	User
set	User

2.20.2. Syntax

```
http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=
gsensor&action=<value>[&<parameter>=<value>]
```

2.20.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads g sensor settings
	SensitivityType	RES	<enum> +X, +Y, +Z, -X, -Y, -Z	Type of sensitivity
set	Enable	REQ, RES	<bool> True, False	Enable or disable gsensor
	SensitivityType.#.Sensitivity	REQ, RES	<enum> Low, Medium, High	Type of sensitivity
	VehicleDirection	REQ, RES	<enum> +X, +Y, +Z, -X, -Y, -Z, None	Direction of vehicle moving
	AlarmOutput	REQ, RES	<csv> 1, 2, 3, 4, 5, 6, Beep, None	Type of alarm output
	Duration	REQ, RES	<enum> None, Always, 5s, 10s, 20s, 30s	Alarm duration

2.20.4. Examples

2.20.5. Getting g sensor settings for Channel 0

REQUEST

```
http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=gsensor&action=view
```

TEXT RESPONSE

```
HTTP/1.0 200 OK  
Content-type: text/plain  
<Body>
```

```
Enable=False  
VehicleDirection=None  
AlarmOutput=None  
Duration=None  
SensitivityType.+X.Sensitivity=Medium  
SensitivityType.+Y.Sensitivity=Medium  
SensitivityType.+Z.Sensitivity=Medium  
SensitivityType.-X.Sensitivity=Medium  
SensitivityType.-Y.Sensitivity=Medium  
SensitivityType.-Z.Sensitivity=Medium
```

JSON RESPONSE

```
HTTP/1.0 200 OK  
Content-type: application/json  
<Body>
```

```
{  
  "Enable": false,  
  "VehicleDirection": "None",  
  "AlarmOutput": [  
    "None"  
  ],  
  "Duration": "None",  
  "SensitivityList": [  
    {  
      "SensitivityType": "+X",  
      "Sensitivity": "Medium"  
    },  
    {
```

```

        "SensitivityType": "+Y",
        "Sensitivity": "Medium"
    },
    {
        "SensitivityType": "+Z",
        "Sensitivity": "Medium"
    },
    {
        "SensitivityType": "-X",
        "Sensitivity": "Medium"
    },
    {
        "SensitivityType": "-Y",
        "Sensitivity": "Medium"
    },
    {
        "SensitivityType": "-Z",
        "Sensitivity": "Medium"
    }
]
}

```

2.20.6. Setting g sensor

Setting up g sensor's Sensitivity Type

REQUEST

```

http://<Device IP>/stw-
cgi/eventsources.cgi?submenu=gsensor&action=set&Enable=False&SensitivityType.
e.+X.Sensitivity=Low&SensitivityType.-
X.Sensitivity=Low&SensitivityType.+Y.Sensitivity=Low&SensitivityType.-
Y.Sensitivity=Low&SensitivityType.+Z.Sensitivity=Low&SensitivityType.-
Z.Sensitivity=Low&VehicleDirection=-Z&AlarmOutput=1,2,3,4&Duration=5s

```

Setting up g sensor's sensitivity

REQUEST

```

http://<Device IP>/stw-
cgi/eventsources.cgi?submenu=gsensor&action=set&Enable=False&SensitivityType.
e.+X.Sensitivity=High&SensitivityType.-X.Sensitivity=High&VehicleDirection=-

```

Z&AlarmOutput=1,2,3,4&Duration=5s

2.21. Temperature Change Detection

2.21.1. Description

The **temperaturechangedetection** submenu configures temperature change detection settings.

NOTE

This chapter applies to network cameras only.

Attribute to check for feature support:

"attributes/Eventsource/Support/TemperatureChangeDetection"

Access level

Action	Camera
view	Admin
set	Admin
remove	Admin

2.21.2. Syntax

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?submenu=temperaturechangedetection&action=<value> [&<pa  
rameter>=<value>]
```

2.21.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads temperature change detection settings
	Channel	REQ, RES	<int>	Channel ID
remove	Channel	REQ	<int>	Channel ID
	ROIIndex	REQ	<int>	ROI index of the region to be removed
set	Channel	REQ, RES	<int>	Channel ID
	Enable	REQ, RES	<bool> True, False	Whether to use temperature change detection
	TemperatureChange.ROI .#.Mode	REQ, RES	<enum> Minimum, Maximum, Average	Temperature change mode for the ROI

Action	Parameter	Request/ Response	Type/ Value	Description
	TemperatureChange.ROI #.Gap	REQ, RES	<enum> Celsius: 20, 40, 60, 80, 100 Fahrenheit: 40, 80, 120, 160, 200	Temperature change gap for the ROI in celsius or fahrenheit
	TemperatureChange.ROI #.DetectionPeriod	REQ, RES	<int>	Temperature change detection period in seconds for the ROI
	TemperatureChange.ROI #.Coordinates	REQ, RES	<string> Format=x1, y1,x2,y2	Coordinates of the ROI region
	TemperatureChange.ROI #.HandoverIndex	REQ, RES	<int>	Handover index associated with the ROI

2.21.4. Examples

2.21.5. Getting temperature change detection settings for Channel 0

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?submenu=temperaturechangedetection&action=view&Channel
=0
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "TemperatureChangeDetection": [
    {
      "Channel": 0,
      "Enable": true,
      "TemperatureChange": [
        {
          "ROI": 1,
```



```

        "Mode": "Maximum",
        "Gap": 20,
        "DetectionPeriod": 1,
        "HandoverIndex": 1,
        "Coordinates": [
            {
                "x": 31,
                "y": 38
            },
            {
                "x": 376,
                "y": 256
            }
        ]
    }
]
}

```

2.21.6. Changing temperature change detection settings

REQUEST

```

stw-
cgi/eventsources.cgi?submenu=temperaturechangedetection&action=set&Channel=
0&Enable=True&TemperatureChange.ROI.1.Mode=Average&TemperatureChange.ROI.1.G
ap=20& TemperatureChange.ROI.1.DetectionPeriod=10&
TemperatureChange.ROI.1.Coordinates=100,100,350,420

```

2.21.7. Removing temperature change detection ROI Region 1

REQUEST

```

http://<Device IP>/stw-
cgi/eventsources.cgi?submenu=temperaturechangedetection&action=remove&Chann
el=0&ROIIndex=1

```

2.22. Temperature Change Detection Options

2.22.1. Description

The **temperaturechangedetectionoptions** submenu provides information about temperature change detection options.

NOTE

This chapter applies to network cameras only.
Attribute to check for feature support:
"attributes/Eventsource/Support/TemperatureChangeDetection"

Access level

Action	Camera
view	Admin

2.22.2. Syntax

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?submenu=temperaturechangedetectionoptions&action=<valu  
e> [&<parameter>=<value>]
```

2.22.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads temperature change detection options
	Channel	REQ, RES	<int>	Channel ID
	Celsius.SupportedGap	RES	<csv> 20, 40, 60, 80, 100	Temperature change gap supported values in celsius
	Fahrenheit.SupportedGap	RES	<csv> 40, 80, 120, 160, 200	Temperature change gap supported values in fahrenheit

2.22.4. Examples

2.22.5. Getting temperature chnage detection options for Channel 0

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?submenu=temperaturechangedetectionoptions&action=view&  
Channel=0
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "TemperatureChangeDetectionOption": [
    {
      "Channel": 0,
      "SupportedGap": {
        "Celsius": "20,40,60,80,100",
        "Fahrenheit": "40,80,120,160,200"
      }
    }
  ]
}
```

2.23. Shock Detection Setup

2.23.1. Description

The **shockdetection** submenu configures the shock detection settings.

NOTE

This chapter applies to the network cameras only.
Attribute to check for feature support: "attributes/Eventsource/Support/ShcockDetection"

Access level

Action	Camera
view	Admin
set	Admin

2.23.2. Syntax

```
http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=
shockdetection&action=<value>[&<parameter>=<value>]
```

2.23.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads shock detection settings
	Channel	REQ	<csv>	Channel ID
set	Channel	REQ, RES	<int>	Channel ID
	Enable	REQ, RES	<bool> True, False	Enables or disables shock detection
	Sensitivity	REQ, RES	<int>	Shock detection sensitivity level
	ThresholdLevel	REQ, RES	<int>	Shock detection threshold level

2.23.4. Examples

2.23.5. Getting shock detection settings for Channel 0

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?msubmenu=shockdetection&action=view&Channel=0
```

TEXT RESPONSE

```
HTTP/1.0 200 OK  
Content-type: text/plain  
<Body>
```

```
Channel.0.Enable=False  
Channel.0.Sensitivity=80  
Channel.0.ThresholdLevel=50
```

JSON RESPONSE

```
HTTP/1.0 200 OK  
Content-type: application/json  
<Body>
```

```
{  
  "ShockDetection": [  
    {  
      "Channel": 0,  
      "Enable": false,
```

```

        "Sensitivity": 80,
        "ThresholdLevel": 50
    }
]
}

```

2.23.6. Changing shock detection settings

REQUEST

```

http://<Device IP>/stw-
cgi/eventsources.cgi?submenu=shockdetection&action=set&Channel=0&Enable=Tru
e&Sensitivity=80&ThresholdLevel=15

```

2.24. Wiper Housing Detection Setup

2.24.1. Description

The **wiperhousingdetection** submenu configures the wiper housing detection settings.

NOTE

This chapter applies to the network cameras only.
Attribute to check for feature support:
"attributes/Eventsource/Support/HousingTampering"

Access level

Action	Camera
view	Admin
set	Admin

2.24.2. Syntax

```

http://<Device IP>/stw-cgi/eventsources.cgi?submenu=
wiperhousingdetection&action=<value>[&<parameter>=<value>]

```

2.24.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads wiper housing detection settings
	Channel	REQ	<int>	Channel ID

Action	Parameter	Request/Response	Type/Value	Description
set	Channel	REQ, RES	<int>	Channel ID
	HousingTamperingEnable	REQ, RES	<bool> True, False	Enables or disables Housing Tampering
	WaterLevelWarningEnable	REQ, RES	<bool> True, False	Enables or disables Water Level Warning
	WiperOperationDuration	REQ, RES	<int>	Duration for wiper operation
	WasherOperationDuration	REQ, RES	<int>	Duration for washer operation
	OperationDelayDuration	REQ, RES	<int>	Operation delay duration

2.24.4. Examples

2.24.5. Getting wiper housing detection settings for Channel 0

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?msubmenu=wiperhousingdetection&action=view&Channel=0
```

TEXT RESPONSE

```
HTTP/1.0 200 OK  
Content-type: text/plain  
<Body>
```

```
Channel.0.HousingTamperingEnable=False  
Channel.0.WaterLevelWarningEnable=True  
Channel.0.WiperOperationDuration=30  
Channel.0.WasherOperationDuration=20  
Channel.0.OperationDelayDuration=5
```

JSON RESPONSE

```
HTTP/1.0 200 OK  
Content-type: application/json  
<Body>
```

```
{
```

```

"WiperHousingDetection": [
  {
    "Channel": 0,
    "HousingTamperingEnable": false,
    "WaterLevelWarningEnable": true,
    "WiperOperationDuration": 30,
    "WasherOperationDuration": 20,
    "OperationDelayDuration": 5
  }
]
}

```

2.24.6. Changing wiper housing detection settings

REQUEST

```

http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=wiperhousingdetection&action=set&Channel=0&
WaterLevelWarningEnable=True&WiperOperationDuration=10&OperationDelayDuratio
n=15

```

2.25. Box Temperature Detection

2.25.1. Description

The **boxtemperaturedetection** submenu configures box temperature detection settings.

NOTE

This chapter applies to network cameras only.
Attribute to check for feature support:
"attributes/Eventsource/Support/BoxTemperatureDetection"

Access level

Action	Camera
view	Admin
set	Admin
remove	Admin

2.25.2. Syntax

```

http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=
boxtemperaturedetection&action=<value>[&<parameter>=<value>]

```

2.25.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads box temperature detection settings
	Channel	REQ, RES	<int>	Channel ID
remove	Channel	REQ	<int>	Channel ID
	ROIIndex	REQ	<int>	ROI index of the region to be removed
set	Channel	REQ, RES	<int>	Channel ID
	Enable	REQ, RES	<bool> True, False	Enables or disables box temperature detection
	ROI.#.TemperatureType	REQ, RES	<enum> Minimum, Maximum, Average	Temperature type for the ROI
	ROI.#.DetectionType	REQ, RES	<enum> Above, Below, Increase, Decrease	Temperature detection type for the ROI
	ROI.#.ThresholdTemperature	REQ, RES	<int>	Threshold Temperature for the ROI
	ROI.#.Coordinate	REQ, RES	<string> Format=x1, y1,x2,y2	Coordinates of the ROI region
	ROI.#.Duration	REQ, RES	<int>	ROI Duration in seconds
	ROI.#.NormalizedEmissivity	REQ, RES	<int>	ROI Normalized Emissivity
	ROI.#.AreaOverlay	REQ, RES	<bool> True, False	Enables or disables ROI Area Overlay
	ROI.#.AvgTemperatureOverlay	REQ, RES	<bool> True, False	Enables or disables ROI Average Temperature Overlay
	ROI.#.MinTemperatureOverlay	REQ, RES	<bool> True, False	Enables or disables ROI Minimum Temperature Overlay
	ROI.#.MaxTemperatureOverlay	REQ, RES	<bool> True, False	Enables or disables ROI Maximum Temperature Overlay
	ROI.#.HandoverIndex	REQ, RES	<int>	Handover index to be attached to ROI. If index is 0, it means "Off"

2.25.4. Examples

2.25.5. Getting box temperature detection settings for Channel 0

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?msubmenu=boxtemperaturedetection&action=view&Channel=0
```

JSON RESPONSE

```
HTTP/1.0 200 OK  
Content-type: application/json  
<Body>
```

```
{  
  "BoxTemperatureDetection": [  
    {  
      "Channel": 0,  
      "Enable": true,  
      "ROIs": [  
        {  
          "ROI": 1,  
          "TemperatureType": "Average",  
          "DetectionType": "Above",  
          "ThresholdTemperature": 39,  
          "Coordinates": [  
            {  
              "x": 43,  
              "y": 23  
            },  
            {  
              "x": 274,  
              "y": 243  
            }  
          ],  
          "Duration": 40,  
          "NormalizedEmissivity": 27,  
          "AreaOverlay": false,  
          "AvgTemperatureOverlay": true,  
          "MinTemperatureOverlay": true,  
          "MaxTemperatureOverlay": true  
        }  
      ]  
    }  
  ]  
}
```

```

    },
    {
      "ROI": 2,
      "TemperatureType": "Maximum",
      "DetectionType": "Increase",
      "ThresholdTemperature": 20,
      "Coordinates": [
        {
          "x": 364,
          "y": 42
        },
        {
          "x": 556,
          "y": 236
        }
      ],
      "Duration": 48,
      "NormalizedEmissivity": 40,
      "AreaOverlay": true,
      "AvgTemperatureOverlay": true,
      "MinTemperatureOverlay": true,
      "MaxTemperatureOverlay": false
    },
    {
      "ROI": 3,
      "TemperatureType": "Minimum",
      "DetectionType": "Below",
      "ThresholdTemperature": 5,
      "Coordinates": [
        {
          "x": 319,
          "y": 307
        },
        {
          "x": 562,
          "y": 451
        }
      ],
      "Duration": 39,
      "NormalizedEmissivity": 41,
      "AreaOverlay": true,

```

```

        "AvgTemperatureOverlay": false,
        "MinTemperatureOverlay": true,
        "MaxTemperatureOverlay": true
    }
}
]
}
}

```

2.25.6. Changing box temperature detection settings

REQUEST

```

http://<Device IP>/stw-
cgi/eventsources.cgi?submenu=boxtemperaturedetection&action=set&Channel=0&R
OI.1.Coordinate=63,37,346,205&ROI.1.TemperatureType=Maximum&ROI.1.DetectionT
ype=Above&ROI.1.ThresholdTemperature=10&ROI.1.Duration=26&ROI.1.NormalizedEm
issivity=33&ROI.1.AreaOverlay=True&ROI.1.AvgTemperatureOverlay=True&ROI.1.Mi
nTemperatureOverlay=True&ROI.1.MaxTemperatureOverlay=True

```

2.25.7. Removing box temperature detection ROI Region 1

REQUEST

```

http://<Device IP>/stw-
cgi/eventsources.cgi?submenu=boxtemperaturedetection&action=remove&ROIIndex
=1&Channel=0

```

2.26. Box Temperature Detection Options

2.26.1. Description

The **boxtemperaturedetectionoptions** submenu provides information about box temperature detection options.

NOTE

This chapter applies to network cameras only.
Attribute to check for feature support:
"attributes/Eventsource/Support/BoxTemperatureDetection"

Access level

Action	Camera
view	Admin

2.26.2. Syntax

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?msubmenu=boxtemperaturedetectionoptions&action=<value>[  
&<parameter>=<value>]
```

2.26.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads box temperature detection options
	Channel	REQ	<int>	Channel ID
	TemperatureType	RES	<enum> Above, Below Increase, Decrease	Condition for temperature detection
	TemperatureType.#.Celsius.Minimum	RES	<int>	Minimum Celsius temperature
	TemperatureType.#.Celsius.Maximum	RES	<int>	Maximum Celsius temperature
	TemperatureType.#.Fahrenheit.Minimum	RES	<int>	Minimum Fahrenheit temperature
	TemperatureType.#.Fahrenheit.Maximum	RES	<int>	Maximum Fahrenheit temperature

2.26.4. Examples

2.26.5. Getting box temperature detection options for Channel 0

REQUEST

```
http://<Device IP>/ stw-  
cgi/eventsources.cgi?msubmenu=boxtemperaturedetectionoptions&action=view&Cha  
nnel=0
```

JSON RESPONSE

```
HTTP/1.0 200 OK  
Content-type: application/json  
<Body>
```

```

{
  "BoxTemperatureDetectionOptions": [
    {
      "Channel": 0,
      "ThresholdTemperature": [
        {
          "TemperatureType": "Above",
          "Celsius": {
            "Min": -20,
            "Max": 130
          },
          "Fahrenheit": {
            "Min": -4,
            "Max": 266
          }
        },
        {
          "TemperatureType": "Below",
          "Celsius": {
            "Min": -20,
            "Max": 130
          },
          "Fahrenheit": {
            "Min": -4,
            "Max": 266
          }
        },
        {
          "TemperatureType": "Increase",
          "Celsius": {
            "Min": 10,
            "Max": 100
          },
          "Fahrenheit": {
            "Min": 50,
            "Max": 212
          }
        },
        {
          "TemperatureType": "Decrease",
          "Celsius": {

```

```

        "Min": 10,
        "Max": 100
    },
    "Fahrenheit": {
        "Min": 50,
        "Max": 212
    }
}
]
}
}

```

2.27. Overspeed

2.27.1. Description

The **overspeed** submenu provides information and set overspeed event for NVR(GPS)

Access level

Action	NVR
view	User
set	User

2.27.2. Syntax

```

http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=
overspeed&action=<value>[&<parameter>=<value>]

```

2.27.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads overspeed settings
set	Enable	REQ, RES	<bool> True, False	Enable or disable overspeed check
	Speed	REQ, RES	<int>	Type of limit speed value

Action	Parameter	Request/ Response	Type/ Value	Description
	AlarmOutput	REQ, RES	<csv> 1, 2, 3, 4, 5, 6, Beep, None	Type of alarm output
	Duration	REQ, RES	<enum> None, Always, 5s, 10s, 20s, 30s	Alarm duration

2.27.4. Examples

2.27.5. Getting overspeed settings

REQUEST

```
http://<Device IP>/stw-cgi/eventsources.cgi?submenu=overspeed&action=view
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

```
Enable=False
Speed=0
AlarmOutput=None
Duration=None
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "Enable": false,
  "Speed": 0,
  "AlarmOutput": [
```

```

        "None"
    ],
    "Duration": "None"
}

```

2.27.6. Applying overspeed settings

REQUEST

```

http:// <Device IP>/stw-
cgi/eventsources.cgi?msubmenu=overspeed&action=set&Enable=True&Speed=50&Alar
mOutput=1&Duration=Always

```

2.28. Object Detection

2.28.1. Description

The **objectdetection** submenu enables the object detection capability in the camera.

NOTE

Only when Object detection or IVA is enabled in the camera, object metadata would be generated. If ObjectDetection submenu is enabled without any object types, only metadata without objectdetection event would be generated.

Access level

Action	NVR	Camera
view	User	ADMIN
set	User	ADMIN

2.28.2. Syntax

```

http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=
objectdetection&action=<value> [&<parameter>=<value>]

```

2.28.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view	Channel	REQ	<csv>	ChanelID
set	Channel	REQ, RES	<int>	ChanelID
	Enable	REQ, RES	<bool> True, False	Enable object detection

Action	Parameter	Request/ Response	Type/ Value	Description
	ObjectTypes	REQ, RES	<csv> Vehicle, Face, Person, LicensePlate	When a configured object is detected, an event would be generated.
	ObjectTypeDetails	REQ, RES	<csv> Vehicle.Types.Bicycle, Vehicle.Types.Car, Vehicle.Types.Motorcycle, Vehicle.Types.Bus, Vehicle.Types.Truck	These parameters indicate the details of the ObjectType top-level object. If none of these details are set, the top-level object will not be detected either.
	Sensitivity	REQ, RES	<int> 1 to 100	Sensitivity level
	Duration	REQ, RES	<int> 1 to 5	Duration in secs
	MinimumObjectSize	REQ, RES	<string>	<p>Minimum size of objects</p> <p>Objects smaller than the specified minimum size are not detected.</p> <p>The size is expressed in the form of <width, height>.</p> <p>The value of MinimumObjectSize must be smaller than the value of MaximumObjectSize.</p>

Action	Parameter	Request/ Response	Type/ Value	Description
	MaximumObjectSize	REQ, RES	<string>	<p>Maximum size of objects</p> <p>Objects bigger than the maximum size are not detected.</p> <p>The size is expressed in the format of <width, height>.</p> <p>The value of MaximumObjectSize must be greater than the value of MinimumObjectSize.</p>
	MinimumObjectSizeInPixels	REQ, RES	<string>	<p>Minimum object size in pixel</p> <p>The size is specified in the form of <width, height>.</p>
	MaximumObjectSizeInPixels	REQ, RES	<string>	<p>Maximum object size in pixel</p> <p>The size is expressed in the form of <width, height>.</p>
	EnableMetadataInExcludeArea	REQ, RES	<bool> True, False	By enabling this parameter, metadata would be generated even for exclude region.
	ExcludeArea.#.Coordinate	REQ, RES	<string>	<p>Exclude region coordinates</p> <p>In this region, object detection does not work</p>
	HandoverIndex	REQ, RES	<int>	HandOverIndex associated with object detection
remove	Channel	REQ	<int>	
	ExcludeAreaIndex	REQ	<csv>	Exclude area index to be removed

2.28.4. Examples

2.28.5. Getting objectdetection settings

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?submenu=objectdetection&action=view
```

JSON RESPONSE

```
HTTP/1.0 200 OK
```

Content-type: application/json

<Body>

```
{
  "ObjectDetection": [
    {
      "Channel": 0,
      "Enable": true,
      "Duration": 1,
      "Sensitivity": 80,
      "MinimumObjectSize": "4,7",
      "MaximumObjectSize": "50,89",
      "MinimumObjectSizeInPixels": "194,194",
      "MaximumObjectSizeInPixels": "1944,1944",
      "ObjectTypes": [
        "Person",
        "Vehicle",
        "Face",
        "LicensePlate"
      ],
      "ObjectTypeDetails": {
        "Vehicle": {
          "Types": [
            "Bicycle",
            "Car",
            "Motorcycle",
            "Bus",
            "Truck"
          ]
        }
      },
      "ExcludeAreas": [
        {
          "ExcludeArea": 1,
          "Coordinates": [
            {
              "x": 1248,
              "y": 502
            },
            {

```

```

        "x": 3173,
        "y": 502
    },
    {
        "x": 3317,
        "y": 1743
    },
    {
        "x": 972,
        "y": 1701
    }
]
},
],
"HandoverIndex": 0
}
]
}

```

2.28.6. Applying objectdetection settings

REQUEST

```

http://<Device IP>/stw-
cgi/eventsources.cgi?submenu=objectdetection&action=set&Channel=0&ObjectTypes=Vehicle,Person,Face,LicensePlate&Sensitivity=50&Enable=True&ExcludeArea.1
.Coordinate=672,1002,1044,254,2291,326,2275,1662

```

2.29. Meta Image Transfer

2.29.1. Description

The **metaimagetransfer** submenu enables the best shot image delivery in metatadata for the selected object types.

Access level

Action	NVR	Camera
view	User	Admin
set	User	Admin

2.29.2. Syntax

```
http://<Device IP>/stw-cgi/eventsources.cgi?submenu=
metaimagetransfer&action=<value> [&<parameter>=<value>]
```

2.29.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
	Channel	REQ	<csv>	Channel ID
set	Channel	REQ, RES	<int>	Channel ID
	ObjectTypes	REQ, RES	<csv> Vehicle, Person, Face, LicensePlate	Bestshot of objects required in metadata
	ImageQuality	REQ, RES	<int>	Quality of the delivered images

2.29.4. Examples

2.29.5. Get the metaimagetransfer settings

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?submenu=metaimagetransfer&action=view&Channel=0
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

```
Channel.0.ObjectTypes=Person,Vehicle,Face,LicensePlate
Channel.0.ImageQuality=75
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
```

<Body>

```
{
  "MetaImageTransfer": [
    {
      "Channel": 0,
      "ObjectTypes": [
        "Person",
        "Vehicle",
        "Face",
        "LicensePlate"
      ],
      "ImageQuality": 75
    }
  ]
}
```

2.29.6. Setting metaimagetransfer

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?submenu=objectdetection&action=set&Channel=0&ObjectTypes=Vehicle,Person,Face,LicensePlate&Sensitivity=50&Enable=True
```

2.30. Face Recognition

2.30.1. Description

The **facerecognition** submenu can be used to enable facerecognition feature on selected channels.

NOTE | This chapter applies to NVR only.

Access level

Action	NVR
view	User
set	User

2.30.2. Syntax

```
http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=
facerecognition&action=<value>[&<parameter>=<value>]
```

2.30.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads facerecognition settings
set	Channel	REQ, RES	<int>	
	Enable	REQ, RES	<bool> True, False	
	GroupIDList	REQ, RES	<csv>	Detection group id list
	Similarity	REQ, RES	<int>	Similarity threshold value

2.30.4. Examples

2.30.5. Set face recognition settings

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?&msubmenu=facerecognition&action=set&Channel=1&Enable=T
rue&GroupIDList=1001&Similarity=12
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

```
OK
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "Response": "Success"
```

```
}
```

2.30.6. View face recognition settings

REQUEST

```
http:// <Device IP>/stw-  
cgi/eventsources.cgi?&msubmenu=facerecognition&action=view&Channel=1
```

TEXT RESPONSE

```
HTTP/1.0 200 OK  
Content-type: text/plain  
<Body>
```

```
Channel.1.Enable=True  
Channel.1.Similarity=12  
Channel.1.GroupIDList=1001
```

JSON RESPONSE

```
HTTP/1.0 200 OK  
Content-type: application/json  
<Body>
```

```
{  
  "facerecognition": [  
    {  
      "Channel": 1,  
      "Enable": true,  
      "Similarity": 12,  
      "GroupIDList": [  
        "1001"  
      ]  
    }  
  ]  
}
```


2.31. OCR

2.31.1. Description

The **ocr** submenu can be used to enable/disable OCR (optical character recognition) feature on channels.

NOTE

This chapter applies to NVR only.

Access level

Action	NVR
view	User
set	User

2.31.2. Syntax

```
http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=
ocr&action=<value>[&<parameter>=<value>]
```

2.31.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads ocr settings
set	Channel	REQ, RES	<int>	
	Enable	REQ, RES	<bool> True, False	

2.31.4. Examples

2.31.5. Set ocr settings

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=ocr&action=set&Channel=1&Enable=True
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

OK

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "Response": "Success"
}
```

2.31.6. View ocr settings

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?submenu=ocr&action=view&Channel=1
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

Channel.1.Enable=True

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "ocr": [{
    "Channel": 1,
    "Enable": true
  }]
}
```

2.32. Thermal Detection Mode

2.32.1. Description

The **thermaldetectionmode** submenu provides setting for switching the operating mode of the camera between bodytemperature detection mode and normal mode.

NOTE This chapter is applicable to dual thermal cameras.

Access level

Action	Camera
view	Admin
set	Admin

2.32.2. Syntax

```
http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=
thermaldetectionmode&action=<value> [&<parameter>=<value>]
```

2.32.3. Parameters

Action	Parameters	Request/ Response	Type/ Value	Description
view	Channel	REQ	<csv>	Channel ID
set	Channel	REQ, RES	<int>	Channel ID
	ThermalMode	REQ, RES	<enum> BodyTempe rature, Normal	Thermal mode Operating mode of dual thermal camera
	FaceDetectionSource	REQ, RES	<enum> Visible, Thermal	Face detection source Source channel to use for face detection Note It can use only WhiteHot thermal color palette if FaceDetectionSource is set to Thermal channel

2.32.4. Examples

2.32.5. Getting current thermal detection mode settings (this submenu supports only JSON response)

REQUEST

```
http://<Device IP>/stw-cgi/  
eventsources.cgi?msubmenu=thermaldetectionmode&action=view&Channel=1
```

JSON RESPONSE

```
HTTP/1.0 200 OK  
Content-type: application/json  
<Body>
```

```
{  
  "ThermalDetectionMode": [  
    {  
      "Channel": 1,  
      "ThermalMode": "Normal",  
      "FaceDetectionSource": "Visible"  
    }  
  ]  
}
```

2.32.6. Setting thermal detection mode to 'Normal' and face detection source to 'Visible'

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?msubmenu=thermaldetectionmode&action=set&Channel=1&Ther  
malMode=Normal&FaceDetectionSource=Visible
```

TEXT RESPONSE

```
HTTP/1.0 200 OK  
Content-type: text/plain  
<Body>
```

```
OK
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "Response": "Success"
}
```

2.33. Body Temperature Detection

2.33.1. Description

The **bodytemperaturedetection** submenu configures body temperature detection settings.

NOTE

This chapter is applicable to dual thermal cameras.
Attribute to check for feature support:
"attributes/Eventsource/Support/[ChannelID]/BodyTemperatureDetection"

Access level

Action	Camera
view	Admin
set	Admin

2.33.2. Syntax

```
http://<Device IP>/stw-cgi/
eventsources.cgi?submenu=bodytemperaturedetection&action=<value>[&<paramete
r>=<value>]
```

2.33.3. Parameters

Action	Parameters	Request/ Response	Type/ Value	Description
view	Channel	REQ	<csv>	Channel Id
set	Channel	REQ, RES	<int>	Channel Id
	Enable	REQ, RES	<bool> True, False	Whether to use Body Temperature Detection event

Action	Parameters	Request/ Response	Type/ Value	Description
	EnableBeepAlarm	REQ, RES	<bool> True, False	Whether to beep alarm when temperature exceeds ThresholdTemperature
	ThersholdTemperature	REQ, RES	<float>	Threshold temperature for detection
	EnableTemperatureMaxLimit	REQ, RES	<bool> Tr True, False	Whether to use TemperatureMaxLimit setting
	EnableTemperatureMinLimit	REQ, RES	<bool> True, False	Whether to use TemperatureMinLimit setting
	TemperatureMaxLimit	REQ, RES	<float>	Excludes detection above the temperature
	TemperatureMinLimit	REQ, RES	<float>	Excludes detection below the temperature
	Coordinates	REQ, RES	<string> Format=x1,y1,x2,y2	Coordinates of detection area The coordinates are expressed in <x1,y1,x2,y2>
	Duration	REQ, RES	<int>	Bodytemperature detection duration in seconds
	Sensitivity	REQ, RES	<int>	Sensitivity level
	EnableOverlay	REQ, RES	<bool> True, False	Whether to use detected area box overlay
	MinimumObjectSize	RES,REQ	<string> Format=w,h	Minimum size of objects Objects smaller than the specified minimum size are not detected. The size is expressed in <width, height>. The value of MinimumObjectSize must be less than the value of MaximumObjectSize .

Action	Parameters	Request/ Response	Type/ Value	Description
	MaximumObjectSize	RES,REQ	<string> Format=w,h	Maximum size of objects Objects bigger than the maximum size are not detected. The size is expressed in <width, height>. The value of MaximumObjectSize must be greater than the value of MinimumObjectSize .
	MinimumObjectSizeInPixels	RES,REQ	<string> Format=w,h	Minimum object size in pixel The size is expressed in <width, height>.
	MaximumObjectSizeInPixels	RES,REQ	<string> Format=w,h	Maximum object size in pixel The size is expressed in <width, height>.

2.33.4. Examples

2.33.5. Getting current body temperature detection settings for Channel 1 (this submenu supports only JSON response)

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?msubmenu=bodytemperaturedetection&action=view&Channel=1
```

JSON RESPONSE

```
HTTP/1.0 200 OK  
Content-type: application/json  
<Body>
```

```
{  
  "BodyTemperatureDetection": [  
    {  
      "Channel": 1,  
      "Enable": true,  
      "MinimumObjectSize": "50,50",
```

```

    "MaximumObjectSize": "80,80",
    "MinimumObjectSizeInPixels": "164,124",
    "MaximumObjectSizeInPixels": "260,195",
    "EnableBeepAlarm": true,
    "ThresholdTemperature": 37.5,
    "EnableTemperatureMaxLimit": true,
    "EnableTemperatureMinLimit": true,
    "TemperatureMaxLimit": 40.0,
    "TemperatureMinLimit": 35.0,
    "Coordinates": [
      {
        "x": 0,
        "y": 0
      },
      {
        "x": 319,
        "y": 121
      }
    ],
    "Duration": 2,
    "Sensitivity": 2,
    "EnableOverlay": false
  }
]
}

```

2.33.6. Setting body temperature detection configurations for Channel 1

REQUEST

```

http://<Device IP>/stw-
cgi/eventsources.cgi?submenu=bodytemperaturedetection&action=set&Channel=1&
Enable=True&EnableBeepAlarm=True&ThresholdTemperature=37.5&EnableTemperature
MaxLimit=True&TemperatureMaxLimit=39&EnableTemperatureMinLimit=True&Temperat
ureMinLimit=35&Coordinates=0,0,100,100&Duration=3&Sensitivity=3&EnableOverla
y=True&MinimumObjectSize=30,30&MaximumObjectSize=50,50

```

TEXT RESPONSE

```

HTTP/1.0 200 OK
Content-type: text/plain

```



```
<Body>
```

OK

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "Response": "Success"
}
```

2.34. Body Temperature Detection Options

2.34.1. Description

The **bodytemperaturedetectionoptions** submenu provides information on body temperature detection settings

NOTE

This chapter is applicable to dual thermal cameras.
Attribute to check for feature support:
"attributes/Eventsource/Support/[ChannelID]/BodyTemperatureDetection"

Access level

Action	Camera
view	Admin
set	Admin

2.34.2. Syntax

```
http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=bodytemperaturedetectionoptions&action=<value>
[&<parameter>=<value>]
```

2.34.3. Parameters

Action	Parameters	Request/Response	Type/Value	Description
view	Channel	REQ	<csv>	Channel Id
set	Channel	REQ, RES	<int>	Channel Id
	Temperature.#.Celsius.Min	RES	<float>	Minimum Celsius temperature
	Temperature.#.Celsius.Max	RES	<float>	Maximum Celsius temperature
	Temperature.#.Fahrenheit.Min	RES	<float>	Minimum Fahrenheit temperature
	Temperature.#.Fahrenheit.Max	RES	<float>	Maximum Fahrenheit temperature

2.34.4. Examples

2.34.5. Getting body temperature detection options for Channel 1 (this submenu supports only JSON response)

REQUEST

```
http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=bodytemperaturedetectionoptions&action=view&Channel=1
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "BodyTemperatureDetectionOptions": [
    {
      "Channel": 1,
      "Temperature": {
        "Celsius": {
          "Min": 30.0,
          "Max": 45.0
        },
        "Fahrenheit": {
          "Min": 86.0,
```

```

        "Max": 113.0
      }
    }
  }
]
}

```

2.35. Temperature Measurement Region Settings

2.35.1. Description

The **temperaturemeasurementregion** submenu configures adjustment of the face area to measure the maximum temperature value.

NOTE

This chapter is applicable to dual thermal cameras.

Attribute to check for feature support:

"attributes/Eventsource/Support/[ChannelID]/BodyTemperatureDetection"

Access level

Action	Camera
view	Admin
set	Admin

2.35.2. Syntax

```

http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=temperaturemeasurementregion&action=<value>[&<
parameter>=<value>]

```

2.35.3. Parameters

Action	Parameters	Request/ Response	Type/ Value	Description
view	Channel	REQ	<csv>	Channel Id
set	Channel	REQ, RES	<int>	Channel Id
	HorizontalRatio	REQ, RES	<int>	Horizontal ratio of detected face marking
	VerticalRatio	REQ, RES	<int>	Vertical ratio of detected face marking
	CenterOffset	REQ, RES	<string> format=x,y	Position offset of detection area

2.35.4. Examples

2.35.5. Getting current temperature measurement region settings for Channel 1 (this submenu supports only JSON response)

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?submenu=temperaturemeasurementregion&action=view&Channel=1
```

JSON RESPONSE

```
HTTP/1.0 200 OK  
Content-type: application/json  
<Body>
```

```
{  
  "TemperatureMeasurementRegion": [  
    {  
      "Channel": 1,  
      "HorizontalRatio": 0,  
      "VerticalRatio": 0,  
      "CenterOffset": [  
        {  
          "x": 0,  
          "y": 0  
        }  
      ]  
    }  
  ]  
}
```

2.35.6. Setting ratio and position of the temperature measurement region for Channel 1 (this submenu supports only JSON response)

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?submenu=temperaturemeasurementregion&action=set&Channel=1&HorizontalRatio=50&VerticalRatio=50&CenterOffset=0,-30
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "Response": "Success"
}
```

2.36. Mask Detection Setup

2.36.1. Description

The **maskdetection** submenu provides how to configure mask detection setup and enables it.

NOTE

Attribute to check for feature support:
"attributes/Eventsource/Support/[ChannelID]/MaskDetection"

Access level

Action	Camera
view	Admin
set	Admin
remove	Admin

2.36.2. Syntax

```
http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=
maskdetection&action=<value> [&<parameter>=<value>]
```

2.36.3. Parameters

Action	Parameters	Request/ Response	Type/ Value	Description
view	Channel	REQ	<csv>	Channel Id
set	Channel	REQ, RES	<int>	Channel Id
	Enable	REQ, RES	<bool> True, False	Enables or disables the mask detection

Action	Parameters	Request/ Response	Type/ Value	Description
	DetectionMode	REQ, RES	<enum> MASK, NO_MASK	Detection mode
	Sensitivity	REQ, RES	<int>	Mask detection sensitivity level
	Duration	REQ, RES	<int>	Mask detection duration in seconds
	MinimumObjectSize	REQ, RES	<string> w,h	<p>Minimum size of objects</p> <p>Objects smaller than the specified minimum size are not detected.</p> <p>The size is expressed in <width, height>.</p> <p>The value of MinimumObjectSize must be smaller than the value of MaximumObjectSize.</p>
	MaximumObjectSize	REQ, RES	<string> w,h	<p>Maximum size of objects</p> <p>Objects bigger than the maximum size are not detected.</p> <p>The size is expressed in the format of <width, height>.</p> <p>The value of MaximumObjectSize must be greater than the value of MinimumObjectSize.</p>
	MinimumObjectSizeInPixels	REQ, RES	<string> w,h	<p>Minimum object size in pixel</p> <p>The size is expressed in <width, height>.</p>
	MaximumObjectSizeInPixels	REQ, RES	<string> w,h	<p>Maximum object size in pixel</p> <p>The size is expressed in <width, height>.</p>
	EnableMetadataInExcludeArea	REQ, RES	<bool> True, False	Enabling this parameter generates metadata even for exclude region.
	ExcludeArea.#,Coordinate	REQ, RES	<string>	<p>Exclude region coordinates</p> <p>In this region, object detection does not work</p>
remove	Channel	REQ	<int>	Channel Id

Action	Parameters	Request/Response	Type/Value	Description
	ExcludeAreaIndex	REQ	<csv> x1,y1,x2,y2	Exclude area index to be removed

2.36.4. Examples

2.36.5. Getting current mask detection setup of Channel 1

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?msubmenu=maskdetection&action=view&Channel=1
```

JSON RESPONSE

```
HTTP/1.0 200 OK  
Content-type: application/json  
<Body>
```

```
{  
  "MaskDetection": [  
    {  
      "Channel": 1,  
      "Enable": true,  
      "DetectionMode": "MASK",  
      "Duration": 2,  
      "Sensitivity": 80,  
      "MinimumObjectSize": "5,8",  
      "MaximumObjectSize": "50,89",  
      "MinimumObjectSizeInPixels": "194,194",  
      "MaximumObjectSizeInPixels": "1944,1944",  
      "EnableMetadataInExcludeArea": false,  
      "ExcludeAreas": [  
        {  
          "ExcludeArea": 1,  
          "Coordinates": [  
            {  
              "x": 714,  
              "y": 424  
            },  
            {  

```

```

        "x": 714,
        "y": 1767
    },
    {
        "x": 2615,
        "y": 1767
    },
    {
        "x": 2615,
        "y": 424
    }
]
}
]
}
]
}
}

```

2.36.6. Setting exclude area for Channel 0

REQUEST

```

http://<Device IP>/stw-
cgi/eventsources.cgi?submenu=maskdetection&action=set&Channel=0&Enable=True
&ExcludeArea.1.Coordinate=714,426,714,1769,2615,1769,2615,426&Sensitivity=50

```

JSON RESPONSE

```

HTTP/1.0 200 OK
Content-type: application/json
<Body>

```

```

{
    "Response": "Success"
}

```

2.37. Cell motion

2.37.1. Description

The **cellmotion** submenu configures the cell motion detection in DVR for the connected analog camera.

NOTE

This chapter is applicable to DVR only.
This feature works in analog camera only.

Access level

Action	DVR
view	User
set	User

2.37.2. Syntax

```
http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=
cellmotion&action=<value> [&<parameter>=<value>]
```

2.37.3. Parameters

Action	Parameters	Request/ Response	Type/ Value	Description
view	Channel	REQ	<csv>	Channel ID
	CellMotionWidth	RES	<int>	Shows maximum width of area of interest
	CellMotionHeight	RES	<int>	Shows maximum height of area of interest
set	Channel	REQ, RES	<int>	Channel ID
	Enable	REQ, RES	<bool>	Sets whether to execute the feature
	Sensitivity	REQ, RES	<int> 1~10	Sets sensitivity level of detection
	Coordinates	REQ, RES	<string>	Information on cells allowed to detect motion

2.37.4. Examples**2.37.5. Getting current information of Channel 1****REQUEST**

```
http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=cellmotion&action=view&Channel=1
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

```
Channel=1
Channel.1.CellMotionWidth= 32
Channel.1.CellMotionHeight= 15
Channel.1.Enable= False
Channel.1.Sensitivity= 3
Channel.1.Coordinates=
Y00: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y01: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y02: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y03: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y04: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y05: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y06: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y07: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y08: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y09: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y10: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y11: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y12: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y13: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y14: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "CellMotionInfos": [{
    "Channel": 1,
    "CellMotionWidth": "32",
    "CellMotionHeight": "15",
    "Enable": false,
```



```

        "Y13": ["0", "0", "0", "0", "0", "0", "0", "0", "0", "0", "0", "0",
"0", "0", "0", "0", "0", "0", "0", "0", "0", "0", "0", "0", "0", "0", "0", "0",
"0", "0", "0", "0", "0", "0"],
        "Y14": ["0", "0", "0", "0", "0", "0", "0", "0", "0", "0", "0", "0",
"0", "0", "0", "0", "0", "0", "0", "0", "0", "0", "0", "0", "0", "0", "0", "0",
"0", "0", "0", "0", "0", "0"]
    }
}
}

```

2.37.6. Setting interest cells to enable motion detection

REQUEST

```
http://<Device IP>/stw-cgi/eventsources.cgi?submenu=cellmotion&action=set
```

content

This submenu only supports POST for configuration. Users should send data in the HTTP body using POST. Please refer to the figure below:

<Body>

```

{"CellMotionInfos":[{"Channel":1,"CellMotionWidth":"32","CellMotionHeight":"
15","Enable":"true","Sensitivity":"3","Coordinates":{"Y00":["0","0","0","0",
"0","0","0","0","0","0","0","0","0","0","0","0","0","0","0","0","0",
"0","0","0","0","0","0","0","0","0","0"],"Y01":["0","0","0","0","0","0","0","0",
"0","0","0","0","0","0","0","0","0","0","0","0","0","0","0","0","0",
"0","0","0","0","0","0"],"Y02":["0","0","0","0","0","0","0","0","0","0","0","0",
"0","0","0","0","0","0","0","0","0","0","0","0","0","0","0","0","0",
"0"],"Y03":["0","0","0","1","1","1","1","1","1","1","1","1","1","1","1",
"0","0","0","0","0","0","0","0","0","0","0","0","0","0","0","0"],"Y04":["0",
"0","0","1","1","1","1","1","1","1","1","1","1","1","1","0","0","0","0",
"0","0","0","0","0","0","0","0","0","0","0"],"Y05":["0","0","0","1","1",
"1","1","1","1","1","1","1","1","1","1","0","0","0","0","0","0",
"0","0","0","0","0","0","0","0"],"Y06":["0","0","0","1","1","1","1","1","1",
"1","1","1","1","1","1","0","0","0","0","0","0","0","0","0","0",
"0","0","0","0"],"Y07":["0","0","0","1","1","1","1","1","1","1","1","1","1",
"1","1","1","0","0","0","0","0","0","0","0","0","0","0","0","0",
"0"],"Y08":["0","0","0","1","1","1","1","1","1","1","1","1","1","1","1","1",
"0","0","0","0","0","0","0","0","0","0","0","0","0"],"Y09":["0","0",

```

```
"0","1","1","1","1","1","1","1","1","1","1","1","1","1","1","0","0","0","0","0",
"0","0","0","0","0","0","0","0","0","0","0","0","0"],"Y10":["0","0","0","0","0","0",
"0","0","0","0","0","0","0","0","0","0","0","0","0","0","0","0","0","0","0",
"0","0","0","0","0","0","0","0"],"Y11":["0","0","0","0","0","0","0","0","0","0","0",
"0","0","0","0","0","0","0","0","0","0","0","0","0","0","0","0","0","0","0",
"0","0","0","0"],"Y12":["0","0","0","0","0","0","0","0","0","0","0","0","0","0",
"0","0","0","0","0","0","0","0","0","0","0","0","0","0","0","0","0","0"],"Y1
3":["0","0","0","0","0","0","0","0","0","0","0","0","0","0","0","0","0","0",
"0","0","0","0","0","0","0","0","0","0","0","0","0","0","0"],"Y14":["0","0","0",
"0","0","0","0","0","0","0","0","0","0","0","0","0","0","0","0","0","0",
"0","0","0","0","0","0","0","0","0","0","0","0","0","0","0","0","0",
"0","0","0","0","0","0","0","0","0","0","0","0","0","0"]}}}]}
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "Response": "Success"
}
```

2.38. Parking detection

2.38.1. Description

The **parkingdetection** submenu configures settings related to parking management for each channel. User can enable or disable a parking detection feature and set the interest area for detecting parking events.

NOTE | This chapter is applicable to camera only.

Access level

Action	Camera
view	Guest
set	Admin
remove	Admin

2.38.2. Syntax

```
http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=
parkingdetection&action=<value>[&<parameter>=<value>]
```

2.38.3. Parameters

Action	Parameters	Request/ Response	Type/	Description
view	Channel	REQ/RES	<csv>	Channel ID A camera uses from 0 to max fixed channel count-1 for channel ID. A user can requests multiple channels with a comma.
set	Channel	REQ	<int> 1 to 4	Channel ID Set the target channel that you want to configure.
	Enable	REQ/RES	<enum>	Configures whether the parking detection feature is active.
	Sensitivity	REQ/RES	<int> 1 to 10	Sensitivity level
	MinimumObjectSize	REQ/RES	<string> W, h	Minimum size of objects Objects smaller than the specified minimum size are not detected. The size is expressed in the form of <width, height>. The value of MinimumObjectSize must be smaller than the value of MaximumObjectSize .
	MaximumObjectSize	REQ/RES	<string> W, h	Maximum size of objects Objects bigger than the maximum size are not detected. The size is expressed as <width, height>. The value of MaximumObjectSize must be greater than the value of MinimumObjectSize .

Action	Parameters	Request/Response	Type/	Description
	MinimumObjectSizeInPixels	REQ/RES	<string> W, h	Minimum object size in pixels The size is expressed as <width, height>.
	MaximumObjectSizeInPixels	REQ/RES	<string> W, h	Maximum object size in pixels The size is expressed as <width, height>.
	Area.#.MaxDetectionCount	REQ/RES	<int>	Configures how many vehicles can be detected in each interest region. A parking detection event will occur only when the MaxDetectionCount of vehicles are parking in that area.
	Area.#.Coordinate	REQ/RES	<string>	Interest region coordinates Parking detection only works in this region.
	ExcludeArea.#.Coordinate	REQ/RES	<string>	Exclude region coordinates In this region, parking detection does not work.
remove	Channel	REQ	<int>	
	AreaIndex	REQ	<csv> #, All	Interest area index to be removed.
	ExcludeAreaIndex	REQ	<csv> #, All	Exclude area index to be removed.

2.38.4. Examples

2.38.5. Getting parking detection settings for all channel

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?submenu=parkingdetection&action=view
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

```
Channel.1.Enable=False
Channel.1.Sensitivity=10
Channel.1.MinimumObjectSize=21,21
Channel.1.MaximumObjectSize=99,99
Channel.1.MinimumObjectSizeInPixels=271,271
Channel.1.MaximumObjectSizeInPixels=950,950
Channel.1.Area.1.Coordinate=353,195,353,1182,1511,1182,1511,195
Channel.1.Area.1.MaxDetectionCount=3
Channel.2.Enable=False
Channel.2.Sensitivity=80
Channel.2.MinimumObjectSize=21,21
Channel.2.MaximumObjectSize=99,99
Channel.2.MinimumObjectSizeInPixels=271,271
Channel.2.MaximumObjectSizeInPixels=950,950
Channel.2.Area.1.Coordinate=414,181,414,1113,1550,1113,1550,181
Channel.2.Area.1.MaxDetectionCount=4
Channel.3.Enable=False
Channel.3.Sensitivity=80
Channel.3.MinimumObjectSize=21,21
Channel.3.MaximumObjectSize=99,99
Channel.3.MinimumObjectSizeInPixels=271,271
Channel.3.MaximumObjectSizeInPixels=950,950
Channel.3.Area.1.Coordinate=350,310,350,802,666,802,666,310
Channel.3.Area.1.MaxDetectionCount=4
Channel.4.Enable=False
Channel.4.Sensitivity=80
Channel.4.MinimumObjectSize=21,21
Channel.4.MaximumObjectSize=301,301
Channel.4.MinimumObjectSizeInPixels=271,271
Channel.4.MaximumObjectSizeInPixels=2707,2707
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "ParkingDetection": [
    {
```



```

    "Channel": 1,
    "Enable": true,
    "Sensitivity": 3,
    "MinimumObjectSize": "4,5",
    "MaximumObjectSize": "65,88",
    "MinimumObjectSizeInPixels": "160,160",
    "MaximumObjectSizeInPixels": "1210,1210",
    "Areas": [
      {
        "Area": 1,
        "Coordinates": [
          {
            "x": 246,
            "y": 230
          },
          {
            "x": 448,
            "y": 854
          },
          {
            "x": 1136,
            "y": 890
          },
          {
            "x": 1324,
            "y": 294
          }
        ],
        "MaxDetectionCount": 4
      }
    ],
  },
  {
    "Channel": 2,
    "Enable": true,
    "Sensitivity": 5,
    "MinimumObjectSize": "4,5",
    "MaximumObjectSize": "65,88",
    "MinimumObjectSizeInPixels": "160,160",
    "MaximumObjectSizeInPixels": "1210,1210",
    "Areas": [

```

```

        {
            "Area": 1,
            "Coordinates": [
                {
                    "x": 515,
                    "y": 392
                },
                {
                    "x": 1525,
                    "y": 451
                },
                {
                    "x": 1452,
                    "y": 873
                },
                {
                    "x": 193,
                    "y": 1122
                }
            ],
            "MaxDetectionCount": 1
        }
    ],
    {
        "Channel": 3,
        "Enable": true,
        "Sensitivity": 5,
        "MinimumObjectSize": "4,5",
        "MaximumObjectSize": "65,88",
        "MinimumObjectSizeInPixels": "160,160",
        "MaximumObjectSizeInPixels": "1210,1210",
        "Areas": [
            {
                "Area": 1,
                "Coordinates": [
                    {
                        "x": 1005,
                        "y": 577
                    },
                    {

```

```

        "x": 308,
        "y": 596
    },
    {
        "x": 353,
        "y": 982
    },
    {
        "x": 1436,
        "y": 1223
    }
],
    "MaxDetectionCount": 3
}
]
},
{
    "Channel": 4,
    "Enable": false,
    "Sensitivity": 5,
    "MinimumObjectSize": "4,5",
    "MaximumObjectSize": "65,88",
    "MinimumObjectSizeInPixels": "160,160",
    "MaximumObjectSizeInPixels": "1210,1210",
    "Areas": [
        {
            "Area": 1,
            "Coordinates": [
                {
                    "x": 246,
                    "y": 507
                },
                {
                    "x": 1469,
                    "y": 104
                },
                {
                    "x": 1514,
                    "y": 484
                },
                {

```

```

        "x": 339,
        "y": 1010
      }
    ],
    "MaxDetectionCount": 2
  }
]
}

```

2.38.6. Setting parking detection area and max vehicle count to be detected

REQUEST

```

http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=parkingdetection&action=set&Channel=1&Sensitiv
ity=10&MinimumObjectSizeInPixels=271,271&MaximumObjectSizeInPixels=950,950&A
rea.1.Coordinate=526,363,473,975,1175,1048,1282,438&Area.1.MaxDetectionCount
=3

```

JSON RESPONSE

```

HTTP/1.0 200 OK
Content-type: application/json
<Body>

```

```

{
  "Response": "Success"
}

```

2.39. ledindicator

2.39.1. Description

The **ledindicator** submenu configures LED settings used for indicating the current parking status to clients. The main feature for this submenu is that it determines how to use 2 LEDs. Users can use those 2 LEDs in an integrated or separate way. Users can choose this based on their parking lot's circumstance. And users can select LED colors when the parking area is full or vacant.

Access level

Action	Camera
view	Admin
set	Admin

2.39.2. Syntax

```
http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=
ledindicator&action=<value> [&<parameter>=<value>]
```

2.39.3. Parameters

Action	Parameters	Request/ Response	Type/ Value	Description
view	Channel	REQ, RES	<csv>	Channel ID
set	LEDUsage	REQ, RES	<int> 1, 2	Define how to use 2 LEDs.
	IndicationPassEnable	REQ, RES	<bool> True, False	<p>Determine whether to use indication pass feature.</p> <p>This feature will work only when the user sets LEDUsage to 1. If this works, a parking detection event will be sent to the previously configured camera and that will generate an event instead of the original camera.</p> <p>Please refer to the Appendix if you are interested with this feature.</p>
	EnableFlickeringAlarm	REQ, RES	<boolean> True,False	Configuring the LED flickering setting. LED will flicker when the alarm event occurs if it is set as True.
	LED.#.EventOn.Color	REQ, RES	<enum> None, Green, Blue, Red, Yellow, Pink1, Pink2, AquaBlue, Purple	Configure the LED color when the parking area is fully occupied.

Action	Parameters	Request/ Response	Type/ Value	Description
	LED.#.EventOn.Text	REQ, RES	<string>	Configure the text when the parking area is fully occupied. This value is only for internal memos and not to be shared.
	LED.#.EventOff.Color	REQ, RES	<enum> None, Green, Blue, Red, Yellow, Pink1, Pink2, AquaBlue, Purple	Configure the LED color when the parking area is empty.
	LED.#.EventOff.Text	REQ, RES	<string>	Configure the text when the parking area is empty. This value is only for internal memos and not to be shared.
	SourceChannel.#.LEDUsageIndex	REQ, RES	<int> 1~2	Determine which LED displays the current status when an event occurs.

2.39.4. Examples

2.39.5. Getting LED settings

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?submenu=ledindicator&action=view
```

TEXT RESPONSE

```
HTTP/1.0 200 OK  
Content-type: text/plain  
<Body>
```

```
Channel.0.LEDUsage=2  
Channel.0.EnableFlickeringAlarm=True  
Channel.0.IndicationPassEnable=False  
Channel.0.LED.1.EventOn.Color=Red
```

```
Channel.0.LED.1.EventOn.Text=Occupied
Channel.0.LED.1.EventOff.Color=Yellow
Channel.0.LED.1.EventOff.Text=Vacant
Channel.0.LED.2.EventOn.Color=Red
Channel.0.LED.2.EventOn.Text=Occupied
Channel.0.LED.2.EventOff.Color=Pink1
Channel.0.LED.2.EventOff.Text=Vacant
SourceChannel.1.LEDUsageIndex=1
SourceChannel.2.LEDUsageIndex=1
SourceChannel.3.LEDUsageIndex=2
SourceChannel.4.LEDUsageIndex=2
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: json/application
<Body>
```

```
{
  "LEDIndicator": [
    {
      "Channel": 0,
      "LEDUsage": 1,
      "EnableFlickeringAlarm ": false,
      "IndicationPassEnable": false,
      "LEDs": [
        {
          "LED": 1,
          "Type": "EventOn",
          "Color": "Red",
          "Text": "Occupied"
        },
        {
          "LED": 1,
          "Type": "EventOff",
          "Color": "Pink1",
          "Text": "Vacant"
        }
      ],
      "SourceChannels": [
        {
```

```

        "SourceChannel": 1,
        "LEDUsageIndex": 1
    },
    {
        "SourceChannel": 2,
        "LEDUsageIndex": 1
    },
    {
        "SourceChannel": 3,
        "LEDUsageIndex": 1
    },
    {
        "SourceChannel": 4,
        "LEDUsageIndex": 1
    }
]
}

```

2.39.6. Setting to use 2 LEDs separately and to show the event status with LED 2 when a parking detection event occurs in Channel 2

REQUEST

```

http://<Device IP>/stw-
cgi/eventsources.cgi?submenu=ledindicator&action=set&LEDUsage=2&SourceChannel.2.LEDUsageIndex=2

```

JSON RESPONSE

```

HTTP/1.0 200 OK
Content-type: application/json
<Body>

```

```

{
    "Response": "Success"
}

```


2.40. Call Request Event Settings

2.40.1. Description

The **callrequest** submenu provides settings for CallRequest events.

NOTE

This chapter applies to network cameras only.

Attribute to check for feature support: "attributes/Eventsource/Support/CallRequest"

Access level

Action	Camera
view	Admin
set	Admin

2.40.2. Syntax

```
http://<Device IP>/stw-cgi/ eventsources.cgi?submenu=  
callrequest&action=<value> [&<parameter>=<value>]
```

2.40.3. Parameters

Action	Parameters	Request/ Response	Type/ Value	Description
view	Channel	REQ	<csv>	Channel ID
set	Channel	REQ, RES	<int>	Channel ID
	Ringtone	REQ, RES	<enum> Default, Ringtone1, Ringtone2, Ringtone3, Ringtone4, Ringtone5	Ringtone played on call request
	CallingTimeout	REQ, RES	<int>	Calling timeout in seconds
	TouchlessCallEnable	REQ, RES	<bool> True, False	Whether to use a touch-free call
	StatusLEDEnable	REQ, RES	<bool> True, False	Whether to use the status LED
	AllowWelcomeLED	REQ, RES	<bool> True, False	Whether to allow the welcome LED It is applied if the StatusLEDEnable parameter is enabled.

2.40.4. Examples

2.40.5. Getting the callrequest event settings

REQUEST

```
http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=callrequest&action=view
```

TEXT RESPONSE

```
HTTP/1.0 200 OK  
Content-type: text/plain  
<Body>
```

```
Channel.0.Ringtone=Default  
Channel.0.CallingTimeout=60  
Channel.0.TouchlessCallEnable=False  
Channel.0.StatusLEDEnable=True  
Channel.0.AllowWelcomeLED=False
```

JSON RESPONSE

```
HTTP/1.0 200 OK  
Content-type: application/json  
<Body>
```

```
{  
  "CallRequest": [  
    {  
      "Channel": 0,  
      "Ringtone": "Default",  
      "CallingTimeout": 60,  
      "TouchlessCallEnable": false,  
      "StatusLEDEnable": true,  
      "AllowWelcomeLED": false  
    }  
  ]  
}
```

2.40.6. Setting the callrequest event settings

To set a ringtone to something other than the default setting, an audio out file must be added. You can check the audio out file at the URL below.

```
http://<Device IP>/stw-cgi/eventrules.cgi?submenu=audiooutfiles&action=view
```

REQUEST

```
http://<Device IP>/stw-cgi/
eventsources.cgi?submenu=callrequest&action=set&Ringtone=Ringtone1&TouchlessCallEnable=True&StatusLEDEnable=False&AllowWelcomeLED=False&CallingTimeout=
20
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

```
OK
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "Response": "Success"
}
```

2.41. DTMF Event Settings

2.41.1. Description

The **DTMF** submenu configures DTMF event settings.

NOTE

This chapter applies to network cameras only.
Attribute to check for feature support: "attributes/Eventsource/Support/DTMF"

Access level

Action	Camera
view	Admin
set	Admin
add	Admin
update	Admin
remove	Admin

2.41.2. Syntax

```
http://<Device IP>/stw-cgi/ eventsources.cgi?submenu=
dtmf&action=<value> [&<parameter>=<value>]
```

2.41.3. Parameters

Action	Parameters	Request/ Response	Type/ Value	Description
view	Channel	REQ	<csv>	Channel ID
	Index	REQ, RES	<int>	DTMF Index
set	Channel	REQ, RES	<int>	Channel ID
	Enable	REQ, RES	<bool> True, False	Whether to use a DTMF event
add	Channel	REQ	<int>	Channel ID
	Code	REQ	<string>	DTMF code
	HandoverIndex	REQ	<int>	HandoverIndex associated with DTMF event
update	Channel	REQ	<int>	Channel ID
	DTMF.#.Code	REQ, RES	<string>	DTMF code
	DTMF.#.HandoverIndex	REQ	<int>	HandoverIndex associated with DTMF event
remove	Channel	REQ	<int>	Channel ID
	Index	REQ	<csv> All, #	DTMF Index

2.41.4. Examples

2.41.5. Getting current DTMF event settings

REQUEST

```
http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=dtmf&action=view
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

```
Channel.0.Enable=True
DTMF.1.Code=1234
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "DTMF": [
    {
      "Channel": 0,
      "Enable": true,
      "DTMF": [
        {
          "Index": 1,
          "Code": "1234"
        }
      ]
    }
  ]
}
```

2.41.6. Enabling a DTMF event

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=dtmf&action=set&Enable=True
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

```
OK
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "Response": "Success"
}
```

2.41.7. Adding a new DTMF code

The number of DTMF codes supported by the camera can be checked in the attribute below.

```
http://<Device IP>/stw-
cgi/attributes.cgi/attributes/Eventsource/Limit/MaxDTMFCodeCount
```

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=dtmf&action=add&Code=1234
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

```
OK
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "Response": "Success"
}
```

2.41.8. Updating DTMF code for index 1

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=dtmf&action=update&DTMF.1.Code=4321
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

```
OK
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "Response": "Success"
}
```

2.41.9. Remove DTMF code for index 1

REQUEST

```
http://<Device IP>/stw-
```

```
cgi/eventsources.cgi?msubmenu=dtmf&action=remove&Index=1
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

```
OK
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "Response": "Success"
}
```

2.42. Tampering Switch Event Settings

2.42.1. Description

The **tamperingswitch** submenu configures the TamperingSwitch event settings

NOTE

This chapter applies to the network cameras only.
Attribute to check for feature support:
"Attributes/Eventsource/Support/TamperingSwitch"

Access level

Action	Camera
view	Admin
set	Admin

2.42.2. Syntax

```
http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=
tamperingswitch&action=<value>[&<parameter>=<value>]
```


2.42.3. Parameters

Action	Parameters	Request/ Response	Type/ Value	Description
view	Channel	REQ	<csv>	Channel ID
set	Channel	REQ, RES	<int>	Channel ID
	Enable	REQ, RES	<bool> True, False	Whether to use a TamperingSwitch event

2.42.4. Examples

2.42.5. Getting tampering switch event settings

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?msubmenu=tamperingswitch&action=view
```

TEXT RESPONSE

```
HTTP/1.0 200 OK  
Content-type: text/plain  
<Body>
```

```
Channel.0.Enable=False
```

JSON RESPONSE

```
HTTP/1.0 200 OK  
Content-type: application/json  
<Body>
```

```
{  
  "TamperingSwitch": [  
    {  
      "Channel": 0,  
      "Enable": false  
    }  
  ]  
}
```

2.42.6. Enabling a tampering switch event

REQUEST

```
http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=tamperingswitch&action=set&Enable=True
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

```
OK
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "Response": "Success"
}
```

2.43. Proximity Sensor Event Settings

2.43.1. Description

The **proximitysensor** submenu configures the ProximitySensor event settings

NOTE

This chapter applies to the network cameras only.
Attribute to check for feature support: "Attributes/Eventsource/Support/ProximitySensor"

Access level

Action	Camera
view	Admin
set	Admin

2.43.2. Syntax

```
http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=
proximitysensor&action=<value> [&<parameter>=<value>]
```

2.43.3. Parameters

Action	Parameters	Request/Response	Type/Value	Description
view	Channel	REQ	<csv>	Channel ID
set	Channel	REQ, RES	<int>	Channel ID
	Enable	REQ, RES	<bool> True, False	Whether to use a ProximitySensor event

2.43.4. Examples

2.43.5. Getting proximity sensor event settings

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=proximitysensor&action=view
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

```
Channel.0.Enable=False
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "ProximitySensor": [
    {
      "Channel": 0,
```

```
        "Enable": false
    }
]
}
```

2.43.6. Enabling a proximity sensor event

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?msubmenu=proximitysensor&action=set&Enable=True
```

TEXT RESPONSE

```
HTTP/1.0 200 OK  
Content-type: text/plain  
<Body>
```

```
OK
```

JSON RESPONSE

```
HTTP/1.0 200 OK  
Content-type: application/json  
<Body>
```

```
{  
    "Response": "Success"  
}
```

2.44. Social Distancing Violation Detection

2.44.1. Description

The **socialdistancingviolation** submenu configures the socialdistancingviolation event settings.

NOTE

This chapter applies to network cameras only.
Attribute to check for feature support:
"Attributes/Eventsource/Support/SocialDistancingViolation"

Access level

Action	Camera
view	Admin
set	Admin

2.44.2. Syntax

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?msubmenu=socialdistancingviolation&action=<value>[&<par  
ameter>=<value>]
```

2.44.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view	Channel	REQ	<csv>	Channel ID
set	Channel	REQ, RES	<int>	Channel ID
	Enable	REQ, RES	<bool> True, False	Enables socialdistancingviolation detection.
	CameraHeight	REQ, RES	<float>	Camera height from the floor in meters
	LensFocal	REQ, RES	<float>	For finetuning the focal length of the lens
	Tilt	REQ, RES	<float>	For adjusting the tilt angle used in the algorithm
	Rotation	REQ, RES	<float>	Rotation angle setting
	MinimumAllowedDistance	REQ, RES	<float>	When the distance between people is less than the set value, an event will be generated.
	Sensitivity	REQ, RES	<int>	Sensitivity level of detection
	Duration	REQ, RES	<int>	When the configured duration of two people within the minimum allowed distance is exceed, an event will be generated.
	MinimumObjectSize	REQ, RES	<string> Format=w,h	Normalized minimum object size (0-99)
	MaximumObjectSize	REQ, RES	<string> Format=w,h	Normalized maximum object size (0-99)

Action	Parameter	Request/Response	Type/Value	Description
	MinimumObjectSizeInPixels	REQ, RES	<string> Format=w,h	Minimum object size in pixels (based on source resolution)
	MaximumObjectSizeInPixels	REQ, RES	<string> Format=w,h	Maximum object size in pixels (based on source resolution)
	EnableMetadataInExcludeArea	REQ, RES	<string>	To allow metadata in the excluded region
	ExcludeArea.#.Coordinate	REQ, RES	<string> Format=x1,y1,x2,y2...	Exclude area. The algorithm will not be active in this region.
check	Channel	REQ, RES	<int>	
	RealLensFocal	RES	<float>	Focal length of the lens
remove	Channel	REQ	<int>	
	ExcludeAreaIndex	REQ	<csv>	List of excluded areas to be removed

2.44.4. Examples

2.44.5. Getting social distancing violation settings

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?submenu=socialdistancingviolation&action=view
```

TEXT RESPONSE

```
HTTP/1.0 200 OK  
Content-type: text/plain  
<Body>
```

```
Channel.0.Enable=False  
Channel.0.CameraHeight=3.0  
Channel.0.LensFocal=4.5  
Channel.0.Tilt=45.0  
Channel.0.Rotation=0.0  
Channel.0.MinimumAllowedDistance=2.0  
Channel.0.Duration=2  
Channel.0.Sensitivity=80
```

```
Channel.0.MinimumObjectSize=3,4
Channel.0.MaximumObjectSize=50,88
Channel.0.MinimumObjectSizeInPixels=128,99
Channel.0.MaximumObjectSizeInPixels=1945,1921
Channel.0.EnableMetadataInExcludeArea=False
Channel.0.ExcludeArea.1.Coordinate=
Channel.0.ExcludeArea.2.Coordinate=
Channel.0.ExcludeArea.3.Coordinate=
Channel.0.ExcludeArea.4.Coordinate=
Channel.0.ExcludeArea.5.Coordinate=
Channel.0.ExcludeArea.6.Coordinate=
Channel.0.ExcludeArea.7.Coordinate=
Channel.0.ExcludeArea.8.Coordinate=
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "SocialDistancingViolation": [
    {
      "Channel": 0,
      "Enable": false,
      "CameraHeight": 3,
      "LensFocal": 4.5,
      "Tilt": 45,
      "Rotation": 0,
      "MinimumAllowedDistance": 2,
      "Duration": 2,
      "Sensitivity": 80,
      "MinimumObjectSize": "3,4",
      "MaximumObjectSize": "50,88",
      "MinimumObjectSizeInPixels": "128,99",
      "MaximumObjectSizeInPixels": "1945,1921",
      "EnableMetadataInExcludeArea": false
    }
  ]
}
```

2.44.6. Checking the focal length of the lens

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?msubmenu=socialdistancingviolation&action=check
```

TEXT RESPONSE

```
HTTP/1.0 200 OK  
Content-type: text/plain  
<Body>
```

```
Channel.0.RealLensFocal=4.7
```

JSON RESPONSE

```
HTTP/1.0 200 OK  
Content-type: application/json  
<Body>
```

```
{  
  "SocialDistancingViolation": [  
    {  
      "Channel": 0,  
      "RealLensFocal": 4.7  
    }  
  ]  
}
```

2.45. MQTT Publication Settings

2.45.1. Description

The **mqttpublication** submenu configures messages for MQTT publication.

NOTE

This chapter applies to network cameras only.
Attribute to check for feature support: "attributes/Network/Support/MQTT" Attribute to check for the maximum number of messages supported: "attributes/Eventsource/Limit/MaxMQTTMessageCount"

Access level

Action	Camera
view	Admin
add/update	Admin
remove	Admin

2.45.2. Syntax

```
http://<Device IP>/stw-cgi/eventsources.cgi?msubmenu=
mqttpublication&action=<value>[&<parameter>=<value>]
```

2.45.3. Parameters

Action	Parameters	Request/ Response	Type/ Value	Description
view				
add/update	Index	REQ, RES	<int>	Message Index
	Name	REQ, RES	<string>	Message Name
	UseDefaultTopicPrefix	REQ, RES	<bool> True, False	Whether to use the default topic prefix
	Topic	REQ, RES	<string>	Message Topic
	QoS	REQ, RES	<enum> 0, 1, 2	Message QoS
	Retain	REQ, RES	<bool> True, False	Whether to use the retain flag
	Payload	REQ, RES	<string>	Message Payload
remove	Index	REQ	<csv> #	Message Index list

2.45.4. Examples (This submenu supports only JSON responses.)

2.45.5. Getting current DTMF event settings

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=mqttpublication&action=view
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
```

<Body>

```
{
  "MQTTPublication": [
    {
      "Index": 1,
      "Name": "test",
      "UseDefaultTopicPrefix": false,
      "Topic": "test",
      "QoS": 0,
      "Retain": false,
      "Payload": "payload"
    }
  ]
}
```

2.45.6. Adding a new MQTT message

The number of MQTT messages supported by the camera can be checked in the attribute below.

```
http://<Device IP>/stw-
cgi/attributes.cgi/attributes/Eventsource/Limit/MaxMQTTMessageCount
```

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?submenu=mqtttpublication&action=add&Name=test&UseDefaultTopicPrefix=True&Topic=topic&QoS=0&Retain=False&Payload=testpayload
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "Response": "Success"
}
```

2.45.7. Updating MQTT message for index 1

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?submenu=mqttpublication&action=update&Index=1&Name=test  
t1&UseDefaultTopicPrefix=True&Topic=topic1&QoS=0&Retain=False&Payload=testpa  
yload1
```

JSON RESPONSE

```
HTTP/1.0 200 OK  
Content-type: application/json  
<Body>
```

```
{  
  "Response": "Success"  
}
```

2.45.8. Remove MQTT message for index 1

REQUEST

```
http://<Device IP>/stw-  
cgi/eventsources.cgi?submenu=mqttpublication&action=remove&Index=1
```

JSON RESPONSE

```
HTTP/1.0 200 OK  
Content-type: application/json  
<Body>
```

```
{  
  "Response": "Success"  
}
```

2.46. MQTT Subscription Settings

2.46.1. Description

The **mqttsubscription** submenu configures messages for MQTT Subscription.

NOTE

This chapter applies to network cameras only.

Attribute to check for feature support: "attributes/Network/Support/MQTT"

Attribute to check for the maximum number of subscription supported:

"attributes/Eventsource/Limit/MaxMQTTSubscriptionCount"

Access level

Action	Camera
view	Admin
add/update	Admin
remove	Admin

2.46.2. Syntax

```
http://<Device IP>/stw-cgi/eventsources.cgi?submenu=
mqttsubscription&action=<value> [&<parameter>=<value>]
```

2.46.3. Parameters

Action	Parameters	Request/ Response	Type/ Value	Description
view				
add/update	Index	REQ, RES	<int>	Subscription Index
	Name	REQ, RES	<string>	Subscription Name
	Topic	REQ, RES	<string>	Subscription Topic
	QoS	REQ, RES	<enum> 0, 1, 2	Subscription QoS

Action	Parameters	Request/Response	Type/Value	Description
	Type	REQ, RES	<enum> OneShot, Property	Subscription Type <ul style="list-style-type: none"> • OneShot: An event occurs whenever a message is received from a topic that is subscribed to and the event occurrence status will be released immediately (Stateless) • Property: When a message is received from a topic that has been subscribed to, an event will occur, and the event occurrence status will be maintained afterward. The status will be disabled if a message different from the subscribing message is received (Stateful)
	Payload	REQ, RES	<string>	Subscription Payload
remove	Index	REQ	<csv> #	Subscription Index list

2.46.4. Examples (This submenu supports only JSON responses.)

2.46.5. Getting current DTMF event settings

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?submenu=mqttsubscription&action=view
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "MQTTSubscription": [
    {
      "Index": 1,
      "Name": "name",
```

```

        "Type": "OneShot",
        "Topic": "topic",
        "QoS": 0,
        "Payload": "payload"
    }
]
}

```

2.46.6. Adding a new MQTT subscription

The number of MQTT subscription supported by the camera can be checked in the attribute below.

```

http://<Device IP>/stw-
cgi/attributes.cgi/attributes/Eventsource/Limit/MaxMQTTSubscriptionCount

```

REQUEST

```

http://<Device IP>/stw-
cgi/eventsources.cgi?submenu=mqttsubscription&action=add&Name=test&Topic=to
pic&QoS=0&Type=OneShot&Payload=testpayload

```

JSON RESPONSE

```

HTTP/1.0 200 OK
Content-type: application/json
<Body>

```

```

{
    "Response": "Success"
}

```

2.46.7. Updating MQTT subscription for index 1

REQUEST

```

http://<Device IP>/stw-
cgi/eventsources.cgi?submenu=mqttsubscription&action=update&Index=1&Name=te
st1&Topic=topic1&QoS=0&Type=OneShot&Payload=testpayload1

```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "Response": "Success"
}
```

2.46.8. Remove MQTT subscription for index 1

REQUEST

```
http://<Device IP>/stw-
cgi/eventsources.cgi?msubmenu=mqttsubscription&action=remove&Index=1
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "Response": "Success"
}
```

Chapter 3. Event Actions

3.1. Email Sending

3.1.1. Description

The **smtp** submenu configures the settings for sending the alert message through email when the specified event occurs.

NOTE | This chapter applies to the NVR only.

Access level

Action	NVR
view	User
set	User

3.1.2. Syntax

```
http://<Device IP>/stw-cgi/eventactions.cgi?msubmenu=
smtp&action=<value>[&<parameter>=<value>]
```

3.1.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads the smtp event action settings
set	MailingPeriod	REQ, RES	<enum> 5s, 10s, 30s, 45s, 5m, 10m, 15m, 20m, 25m, 30m	Mailing period
	EventDetection	REQ, RES	<bool> True, False	Whether to send an email when a specific event is detected
	AlarmInput	REQ, RES	<bool> True, False	Whether to send an email when the alarm input event or network alarm input event occurs

Action	Parameter	Request/ Response	Type/ Value	Description
	SystemEvent	REQ, RES	<csv> Gsensor, Emergency Trigger, ChangePas sword, HDDInform ation, PowerOnOf f, ManualRec ord, Videoloss, None	System event to perform the smtp event action
	RecipientGroupID.#.EventDetection	REQ, RES	<bool> True, False	Whether to send an email to the specified group when a specific event is detected
	RecipientGroupID.#.AlarmInput	REQ, RES	<bool> True, False	Whether to send an email to the specified group when the alarm input event or network alarm input event occurs
	RecipientGroupID.#.SystemEvent	REQ, RES	<csv> Gsensor, Emergency Trigger, ChangePas sword, HDDInform ation, PowerOnOf f, ManualRec ord None	System event to perform the smtp event action with corresponding email recipient group

3.1.4. Examples

3.1.5. Getting SMTP event action settings

REQUEST

```
http://<Device IP>/stw-cgi/eventactions.cgi?submenu=smtp&action=view
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

```
MailingPeriod=15m
EventDetection=True
AlarmInput=True
SystemEvent=ChangePassword,HDDInformation,PowerOnOff,ManualRecord
RecipientGroupID.Group1.EventDetection=True
RecipientGroupID.Group1.AlarmInput=True
RecipientGroupID.Group1.SystemEvent=ChangePassword,HDDInformation,PowerOnOff
,ManualRecord
RecipientGroupID.Group2.EventDetection=False
RecipientGroupID.Group2.AlarmInput=False
RecipientGroupID.Group2.SystemEvent=None
RecipientGroupID.Group3.EventDetection=False
RecipientGroupID.Group3.AlarmInput=False
RecipientGroupID.Group3.SystemEvent=None
RecipientGroupID.Group4.EventDetection=False
RecipientGroupID.Group4.AlarmInput=False
RecipientGroupID.Group4.SystemEvent=None
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "MailingPeriod": "10m",
  "EventDetection": true,
  "AlarmInput": true,
  "SystemEvent": [
    "ChangePassword",
    "HDDInformation",
    "PowerOnOff",
    "ManualRecord"
  ],
```

```

"RecipientGroups": [
  {
    "RecipientGroupID": "Group 1",
    "EventDetection": true,
    "AlarmInput": true,
    "SystemEvent": [
      "ChangePassword",
      "HDDInformation",
      "PowerOnOff",
      "ManualRecord"
    ]
  },
  {
    "RecipientGroupID": "Group 2",
    "EventDetection": false,
    "AlarmInput": false,
    "SystemEvent": [
      "None"
    ]
  }
]
}

```

3.1.6. Setting the mailing period

REQUEST

```

http://<Device IP>/stw-
cgi/eventactions.cgi?msubmenu=smtp&action=set&MailingPeriod=15m

```

3.1.7. Sending email when event detection occurs

REQUEST

```

http://<Device IP>/stw-
cgi/eventactions.cgi?msubmenu=smtp&action=set&EventDetection=True

```

3.1.8. Setting a system event for email sending action

REQUEST

```

http://<Device IP>/stw-
cgi/eventactions.cgi?msubmenu=smtp&action=set&RecipientGroupID.group1.System

```

Event=ChangePassword,HDDInformation,PowerOnOff,ManualRecord

3.2. Complex Action

3.2.1. Description

The **complexaction** submenu specifies the event types for an alarm output and the duration as well as the preset index that the camera will move to when a specified event occurs.

Access level

Action	Camera	Encoder	NVR
view	Admin	Admin	User
set	Admin	Admin	User

3.2.2. Syntax

```
http://<Device IP>/stw-cgi/eventactions.cgi?submenu=  
complexaction&action=<value>[&<parameter>=<value>]
```

3.2.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view	EventType	REQ	<enum> Timer, NetworkDisconnect, Channel.#.FaceDetection, Channel.#.FogDetection, Channel.#.DefocusDetection, Channel.#.VideoAnalysis,AlarmInput.#, Channel.#.NetworkAlarmInput, Channel.#.TamperingDetection, Channel.#.MotionDetection, Channel.#.VideoLoss, Channel.#.CameraEvent, Channel.#.ShockDetection, Channel.#.ObjectDetection, Channel.#.MaskDetection, Channel.#.SocialDistancingViolation, Channel.#.BodyTemperatureDetection	Event type

Action	Parameter	Request/ Response	Type/ Value	Description
set	EventType	REQ, RES	<enum> Timer, NetworkDisconnect, Channel.#.FaceDetection, Channel.#.FogDetection, Channel.#.DefocusDetection, Channel.#.VideoAnalysis, AlarmInput.#, Channel.#.NetworkAlarmInput, Channel.#.TamperingDetection, Channel.#.MotionDetection, Channel.#.VideoLoss, Channel.#.CameraEvent, Channel.#.ShockDetection, Channel.#.ObjectDetection, Channel.#.MaskDetection, Channel.#.SocialDistancingViolation, Channel.#.BodyTemperatureDetection	Event type
	Channel.#.PresetIndex	REQ, RES	<int>	Preset index number as per Channel ID
	AlarmOutput	REQ, RES	<csv> 1, 2, 3, 4, Beep, None	Alarm output
	Duration	REQ, RES	<enum> None, Always, 5s, 10s, 20s, 30s	Alarm output duration

Action	Parameter	Request/ Response	Type/ Value	Description
	Enable	REQ, RES	<bool> True, False	<p>Whether to activate or deactivate the rule</p> <ul style="list-style-type: none"> • True: Activated • False: Deactivated <p>CAMERA ONLY</p> <p>ENCODER ONLY</p>
	ScheduleType	REQ, RES	<enum> Always, Scheduled	<p>Time schedule for event operation</p> <ul style="list-style-type: none"> • Always: All the time • Scheduled: Only when scheduled <p>CAMERA ONLY</p> <p>ENCODER ONLY</p>
	<ddd>	REQ, RES	<bool> 0, 1	<p>Day of week selected for event operation</p> <ul style="list-style-type: none"> • 0: Disabled • 1: Enabled <p>This parameter is valid only when Activate is set to Scheduled.</p> <p><ddd> represents day of the week, and should be specified in the short form such as SUN, MON, TUE, WED, THU, FRI, and SAT in uppercase.</p> <p>e.g.) 'SUN=1' indicates recording is activated every Sunday 12:00 AM to 11:59 PM unless the specific time is not set using the <dddh> parameter such like SUN1=1, SUN2=1, etc.</p> <p>CAMERA ONLY</p> <p>ENCODER ONLY</p>

Action	Parameter	Request/ Response	Type/ Value	Description
	EveryDay	REQ, RES	<bool> 0, 1	<p>Whether to activate or deactivate the event operation every day</p> <ul style="list-style-type: none"> • 0: Disabled • 1: Enabled <p>This parameter is valid only when Activate is set to Scheduled.</p> <p>'EveryDay=1', denoting that the recording is activated every day, is the same as when the ScheduleType parameter is set to Always.</p> <p>CAMERA ONLY</p> <p>ENCODER ONLY</p>
	<dddh>	REQ, RES	<bool> 0, 1	<p>Time of day selected for event operation</p> <ul style="list-style-type: none"> • 0: Disabled • 1: Enabled <p>This parameter is valid only when Activate is set to Scheduled.</p> <p><dddh> stands for the day of the week and time in hours. e.g. SUN1 means 1:00 AM on Sunday. MON2 means 2:00 AM on Monday.</p> <p>This parameter is valid only when <corresponding weekday> is set to 1; e.g. SUN=1 is required for SUN0 ... SUN23.</p> <p>'SUN=1&SUN18=1' means that the event operation is activated every Sunday 6:00 PM to 6:59 PM.</p> <p>CAMERA ONLY</p> <p>ENCODER ONLY</p>

Action	Parameter	Request/ Response	Type/ Value	Description
	EveryDay<h>	REQ, RES	<bool> 0, 1	<p>Daily time for event operation</p> <ul style="list-style-type: none"> • 0: Disabled • 1: Enabled <p>This parameter is valid only when Activate is set to Scheduled.</p> <p><h> stands for the hours such as 0,1,2,3,4..10,11,12,...,23.</p> <p>This parameter is valid only when EveryDay is set to 1; e.g. EveryDay=1 is required for EveryDay0 ... EveryDay23.</p> <p>'EveryDay=1&EveryDay18=1' means the event operation is activated every day 6:00 PM to 6:59 PM.</p> <p>CAMERA ONLY</p> <p>ENCODER ONLY</p>

Action	Parameter	Request/ Response	Type/ Value	Description
	<dddh>.FromTo	REQ, RES	<string>	<p>The time of week selected for event operation</p> <p>The time is specified in the format of <mm-mm>.</p> <p>The first 'mm' must be smaller than or equal to the second 'mm'.</p> <p>This parameter is valid only when Activate is set to Scheduled.</p> <p>This parameter is also valid only when <corresponding weekday><hour> is set to 1; e.g. SUN0=1 is required for SUN0.FromTo.</p> <p>'SUN=1&SUN18=1&SUN18.FromTo=12-20' means that the event operation is activated every Sunday from 6:12 PM to 6:20 PM.</p> <p>CAMERA ONLY</p> <p>ENCODER ONLY</p>

Action	Parameter	Request/Response	Type/Value	Description
	EventAction	REQ, RES	<csv> AlarmOutput.#, SMTP, FTP, Record, HTTP, GoToPreset	<p>Event action</p> <ul style="list-style-type: none"> AlarmOutput.#: Activates alarm output when the configured event occurs. SMTP: Sends notification and image as attachment via SMTP when the configured event occurs. FTP: Uploads image via FTP when the configured event occurs. Record: Saves event video on the storage device when the configured event occurs. (Refer to 'Recording' document (of recording.cgi) for information on configuring recording settings such as pre and post event buffers) GoToPreset: Moves to the specified preset position when the configured event occurs. <p>Note transfer.cgi is used to configure FTP/SMTP server settings.</p> <p>CAMERA ONLY</p> <p>ENCODER ONLY</p>
	AlarmOutput.#.Duration	REQ, RES	<enum> None, Always, 5s, 10s, 15s	<p>Alarm output duration when the event occurs</p> <p>AlarmOutput.#.Duration is valid only when EventAction is set to AlarmOutput.# .</p> <p>CAMERA ONLY</p> <p>ENCODER ONLY</p>

3.2.4. Examples

3.2.5. Getting Complexation event action settings from NVR

REQUEST

```
http://<Device IP>/stw-  
cgi/eventactions.cgi?submenu=complexaction&action=view
```

TEXT RESPONSE

```
HTTP/1.0 200 OK  
Content-type: text/plain  
<Body>
```

```
AlarmInput.1.Channel.0.PresetIndex=0  
AlarmInput.1.AlarmOutput=1,2,3,4  
AlarmInput.1.Duration=10s  
AlarmInput.2.Channel.1.PresetIndex=0  
AlarmInput.2.AlarmOutput=1,2,3,4  
AlarmInput.2.Duration=10s  
AlarmInput.3.Channel.2.PresetIndex=0  
AlarmInput.3.AlarmOutput=1,2,3,4  
AlarmInput.3.Duration=10s  
...  
Channel.0.NetworkAlarmInput.Channel.0.PresetIndex=0  
Channel.0.NetworkAlarmInput.AlarmOutput=1,2,3,4  
Channel.0.NetworkAlarmInput.Duration=10s  
Channel.1.NetworkAlarmInput.Channel.1.PresetIndex=0  
Channel.1.NetworkAlarmInput.AlarmOutput=1,2,3,4  
Channel.1.NetworkAlarmInput.Duration=10s  
Channel.2.NetworkAlarmInput.Channel.2.PresetIndex=0  
Channel.2.NetworkAlarmInput.AlarmOutput=1,2,3,4  
Channel.2.NetworkAlarmInput.Duration=10s  
Channel.3.NetworkAlarmInput.Channel.3.PresetIndex=0  
Channel.3.NetworkAlarmInput.AlarmOutput=1,2,3,4  
Channel.3.NetworkAlarmInput.Duration=10s  
...
```

JSON RESPONSE

```
HTTP/1.0 200 OK
```

Content-type: text/plain

<Body>

```
{
  "ComplexActions": [
    {
      "EventType": "AlarmInput.#",
      "Actions": [
        {
          "AlarmInput": 1,
          "Presets": [
            {
              "Channel": 0,
              "PresetIndex": 0
            }
          ],
          "AlarmOutput": [
            "None"
          ],
          "Duration": "10s"
        }
      ]
    },
    {
      "EventType": "Channel.#.NetworkAlarmInput",
      "Actions": [
        {
          "Channel": 0,
          "Presets": [
            {
              "Channel": 0,
              "PresetIndex": 0
            }
          ],
          "AlarmOutput": [
            "None"
          ],
          "Duration": "10s"
        }
      ]
    }
  ]
}
```

```

    },
    {
      "EventType": "Channel.#.CameraEvent",
      "Actions": [
        {
          "Channel": 0,
          "Presets": [
            {
              "Channel": 0,
              "PresetIndex": 0
            }
          ],
          "AlarmOutput": [
            "None"
          ],
          "Duration": "10s"
        }
      ]
    },
    {
      "EventType": "Channel.#.VideoLoss",
      "Actions": [
        {
          "Channel": 0,
          "AlarmOutput": [
            "None"
          ],
          "Duration": "10s"
        }
      ]
    }
  ]
}

```

3.2.6. Getting Complexation event action settings from camera

REQUEST

```

http://<Device IP>/stw-
cgi/eventactions.cgi?msubmenu=complexaction&action=view

```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

```
Timer.Enable=False
Timer.ScheduleType=Always
Timer.SUN=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Timer.MON=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Timer.TUE=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Timer.WED=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Timer.THU=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Timer.FRI=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Timer.SAT=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Timer.AlarmOutput.1.Duration=None
Timer.EventAction=None
AlarmInput.1.Enable=True
AlarmInput.1.ScheduleType=Always
AlarmInput.1.SUN=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
AlarmInput.1.MON=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
AlarmInput.1.TUE=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
AlarmInput.1.WED=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
AlarmInput.1.THU=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
AlarmInput.1.FRI=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
AlarmInput.1.SAT=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
AlarmInput.1.AlarmOutput.1.Duration=None
AlarmInput.1.EventAction=None
NetworkDisconnect.Enable=False
NetworkDisconnect.ScheduleType=Always
NetworkDisconnect.SUN=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
NetworkDisconnect.MON=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
NetworkDisconnect.TUE=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
NetworkDisconnect.WED=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
NetworkDisconnect.THU=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
NetworkDisconnect.FRI=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
NetworkDisconnect.SAT=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
NetworkDisconnect.AlarmOutput.1.Duration=None
NetworkDisconnect.EventAction=None
Channel.0.MotionDetection.Enable=False
Channel.0.MotionDetection.ScheduleType=Always
```

```

Channel.0.MotionDetection.SUN=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0
Channel.0.MotionDetection.MON=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0
Channel.0.MotionDetection.TUE=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0
Channel.0.MotionDetection.WED=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0
Channel.0.MotionDetection.THU=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0
Channel.0.MotionDetection.FRI=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0
Channel.0.MotionDetection.SAT=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0
Channel.0.MotionDetection.AlarmOutput.1.Duration=None
Channel.0.MotionDetection.EventAction=None
Channel.0.VideoAnalysis.Enable=False
Channel.0.VideoAnalysis.ScheduleType=Always
Channel.0.VideoAnalysis.SUN=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Channel.0.VideoAnalysis.MON=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Channel.0.VideoAnalysis.TUE=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Channel.0.VideoAnalysis.WED=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Channel.0.VideoAnalysis.THU=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Channel.0.VideoAnalysis.FRI=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Channel.0.VideoAnalysis.SAT=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Channel.0.VideoAnalysis.AlarmOutput.1.Duration=None
Channel.0.VideoAnalysis.EventAction=None
Channel.0.FaceDetection.Enable=False
Channel.0.FaceDetection.ScheduleType=Always
Channel.0.FaceDetection.SUN=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Channel.0.FaceDetection.MON=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Channel.0.FaceDetection.TUE=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Channel.0.FaceDetection.WED=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Channel.0.FaceDetection.THU=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Channel.0.FaceDetection.FRI=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Channel.0.FaceDetection.SAT=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Channel.0.FaceDetection.AlarmOutput.1.Duration=None
Channel.0.FaceDetection.EventAction=None
Channel.0.TamperingDetection.Enable=False
Channel.0.TamperingDetection.ScheduleType=Always
Channel.0.TamperingDetection.SUN=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

```



```

0 0
Channel.0.TamperingDetection.MON=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0
Channel.0.TamperingDetection.TUE=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0
Channel.0.TamperingDetection.WED=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0
Channel.0.TamperingDetection.THU=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0
Channel.0.TamperingDetection.FRI=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0
Channel.0.TamperingDetection.SAT=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0
Channel.0.TamperingDetection.AlarmOutput.1.Duration=None
Channel.0.TamperingDetection.EventAction=None
Channel.0.DefocusDetection.Enable=False
Channel.0.DefocusDetection.ScheduleType=Always
Channel.0.DefocusDetection.SUN=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0
Channel.0.DefocusDetection.MON=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0
Channel.0.DefocusDetection.TUE=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0
Channel.0.DefocusDetection.WED=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0
Channel.0.DefocusDetection.THU=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0
Channel.0.DefocusDetection.FRI=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0
Channel.0.DefocusDetection.SAT=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0
Channel.0.DefocusDetection.AlarmOutput.1.Duration=None
Channel.0.DefocusDetection.EventAction=None
Channel.0.FogDetection.Enable=False
Channel.0.FogDetection.ScheduleType=Always
Channel.0.FogDetection.SUN=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Channel.0.FogDetection.MON=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Channel.0.FogDetection.TUE=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Channel.0.FogDetection.WED=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Channel.0.FogDetection.THU=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Channel.0.FogDetection.FRI=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

```

```
Channel.0.FogDetection.SAT=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  
Channel.0.FogDetection.AlarmOutput.1.Duration=None  
Channel.0.FogDetection.EventAction=None
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

[illegible]

[illegible]

[illegible]

[illegible][illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible][illegible]

```
],  
"WED": [  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0"  
],  
"THU": [  
    "0",  
    "0",  
    "0",  
    "0"
```

[illegible]

[illegible]

[illegible]

```
[ ,  
  "WED": [  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0"  
  ],  
  "THU": [  
    "0",  
    "0",  
    "0",  
    "0",  
    "0",  
    "0"
```

```
[  
    "0"  
],  
  
"FRI": [  
    "0"  
]
```

```
        "0",  
        "0",  
        "0"  
    ],  
    "SAT": [  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0"  
    ]  
},  
"AlarmOutputs": [  
    {  
        "AlarmOutput": 1,  
        "Duration": "None"  
    }  
],  
"EventActions": [  
    "None"  
]  
}
```


[illegible]

[illegible]


```
{  
  "EventType": "Channel.#.FaceDetection",  
  "Actions": [  
    {  
      "Channel": 0,  
      "Enable": false,  
      "ScheduleType": "Always",  
      "Schedule": {  
        "SUN": [  
          "0",  
          "0",  
          "0",  
          "0",  
          "0",  
          "0",  
          "0",  
          "0",  
          "0",  
          "0",  
          "0",  
          "0",  
          "0",  
          "0",  
          "0",  
          "0",  
          "0",  
          "0",  
          "0",  
          "0",  
          "0",  
          "0",  
          "0",  
          "0",  
          "0",  
          "0",  
          "0",  
          "0",  
          "0"  
        ],  
        "MON": [  
          "0",  
          "0",  
          "0",  
          "0",  
          "0",  
          "0"
```

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

```

        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
    ]
},
"AlarmOutputs": [
    {
        "AlarmOutput": 1,
        "Duration": "None"
    }
],
"EventActions": [
    "None"
]
}
]
},
{
    "EventType": "Channel.#.DefocusDetection",
    "Actions": [
        {

```

[illegible]

[illegible]

[illegible]

1,

[illegible]

[illegible]


```
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0"  
    ]  
},  
"AlarmOutputs": [  
    {  
        "AlarmOutput": 1,  
        "Duration": "None"  
    }  
],  
"EventActions": [  
    "None"  
]  
}  
]  
},  
{  
    "EventType": "Channel.#.FogDetection",  
    "Actions": [  
        {  
            "Channel": 0,  
            "Enable": false,
```

[illegible]

[illegible]

[illegible]

```
[  
    "FRI": [  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0",  
        "0"  
    ],  
    "SAT": [  
        "0",  
        "0",  
        "0",  
        "0",  
        "0"
```

```

        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0",
        "0"
    ]
},
"AlarmOutputs": [
    {
        "AlarmOutput": 1,
        "Duration": "None"
    }
],
"EventActions": [
    "None"
]
}
]
}
]
}

```

3.2.7. Moving to preset 1 for the alarm input

REQUEST

```

http://<Device IP>/stw-
cgi/eventactions.cgi?submenu=complexaction&action=set&EventType=AlarmInput.

```

```
1&Channel.0.PresetIndex=1
```

3.2.8. Setting the alarm always out for the video loss event

REQUEST

```
http://<Device IP>/stw-  
cgi/eventactions.cgi?msubmenu=complexaction&action=set&EventType=Channel.0.V  
ideoLoss&AlarmDuration=Always
```

Chapter 4. Event Rules

4.1. Event Rules

4.1.1. Description

eventrules.cgi is used to add or update event rules. An event rule defines that which action will be performed when a certain specific event occurs at a specified day and time.

NOTE | This chapter applies to the network cameras only.

Access level

Action	Camera
view	Admin
add, update	Admin
remove	Admin

4.1.2. Syntax

```
http://<Device IP>/stw-cgi/eventrules.cgi?submenu=  
rules&action=<value> [&<parameter>=<value>]
```

4.1.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads the event rules settings.
add, update	RuleIndex	REQ, RES	<int>	Index number of the rule Note RuleIndex is a response parameter when it is used with the add action. And it is a request parameter for the update action. Note RuleIndex must be sent together with the update action.

Action	Parameter	Request/ Response	Type/ Value	Description
	RuleName	REQ, RES	<string>	<p>Rule name</p> <p>The rule name should be unique.</p> <p>Note RuleName and EventSource must be sent together with the add action.</p>
	EventSource	REQ, RES	<enum> AlarmInput.#, MotionDetection, VideoLoss, NetworkEvent, FaceDetection, TamperingDetection, AudioDetection, Tracking, Timer, OpenSDK, UserInput, DefocusDetection, PeopleCount, HeatMap, FogDetection, AudioAnalysis, ShockDetection, TemperatureChanged etection, BoxTemperatureDete ction, ObjectDetection, SocialDistancingViolat ion, CallRequest, TamperingSwitch, DTMFReceived, ProximitySensor	<p>Event source</p> <p>Note RuleName and EventSource must be sent together with the add action.</p> <p>Caution Once any event source is selected, the same event source cannot be added to a new rule.</p>
	Enable	REQ, RES	<bool> True, False	<p>Whether to activate or deactivate the rule</p> <ul style="list-style-type: none"> • True: Activated • False: Deactivated

Action	Parameter	Request/ Response	Type/ Value	Description
	ScheduleType	REQ, RES	<enum> Always, Scheduled	<p>Time schedule for event operation</p> <ul style="list-style-type: none"> • Always: All the time • Scheduled: Only when scheduled
	<ddd>	REQ, RES	<bool> 0, 1	<p>Day of week selected for event operation</p> <ul style="list-style-type: none"> • 0: Disabled • 1: Enabled <p>This parameter is valid only when Activate is set to Scheduled.</p> <p><ddd> stands for week of the day and should be specified in the short form such as SUN, MON, TUE, WED, THU, FRI, and SAT in uppercase.</p> <p>e.g.) 'SUN=1' indicates recording is activated every Sunday 12:00 AM to 11:59 PM unless the specific time is not set using the <dddh> parameter such like SUN1=1, SUN2=1, etc.</p>
	EveryDay	REQ, RES	<bool> 0, 1	<p>Whether to activate or deactivate the event operation every day</p> <ul style="list-style-type: none"> • 0: Disabled • 1: Enabled <p>This parameter is valid only when Activate is set to Scheduled.</p> <p>'EveryDay=1', denoting that the recording is activated every day, is same as the ScheduleType parameter is set to Always.</p>

Action	Parameter	Request/ Response	Type/ Value	Description
	<dddh>	REQ, RES	<bool> 0, 1	<p>Time of day selected for event operation</p> <ul style="list-style-type: none"> • 0: Disabled • 1: Enabled <p>This parameter is valid only when Activate is set to Scheduled.</p> <p><dddh> stands for the day of the week and time in hour. e.g. SUN1 means 1:00 AM on Sunday. MON2 means 2:00 AM on Monday.</p> <p>This parameter is valid only when <corresponding weekday> is set to 1; e.g. SUN=1 is required for SUN0 ... SUN23.</p> <p>'SUN=1&SUN18=1' means that the event operation is activated every Sunday 6:00 PM to 6:59 PM.</p>
	EveryDay<h>	REQ, RES	<bool> 0, 1	<p>Time of everyday for event operation</p> <ul style="list-style-type: none"> • 0: Disabled • 1: Enabled <p>This parameter is valid only when Activate is set to Scheduled.</p> <p><h> stands for the hours such as 0,1,2,3,4..10,11,12,...,23.</p> <p>This parameter is valid only when EveryDay is set to 1; e.g. EveryDay=1 is required for EveryDay0 ... EveryDay23.</p> <p>'EveryDay=1&EveryDay18=1' means the event operation is activated every day 6:00 PM to 6:59 PM.</p>

Action	Parameter	Request/ Response	Type/ Value	Description
	<dddh>.FromTo	REQ, RES	<string>	<p>The time of week selected for event operation</p> <p>The time is specified in the format of <mm-mm>.</p> <p>The first 'mm' must be smaller than or equal to the second 'mm'.</p> <p>This parameter is valid only when Activate is set to Scheduled.</p> <p>This parameter is also valid only when <corresponding weekday><hour> is set to 1; e.g. SUN0=1 is required for SUN0.FromTo.</p> <p>'SUN=1&SUN18=1&SUN18.FromTo=12-20' means that the event operation is activated every Sunday 6:12 PM to 6:20 PM.</p>
	EveryDay<h>.FromTo	REQ, RES	<string>	<p>The time for everyday event action recording</p> <p>The time is specified in the format of <mm-mm>.</p> <p>The first 'mm' must be smaller than or equal to the second 'mm'.</p> <p>This parameter is valid only when Activate is set to Scheduled.</p> <p>This parameter is valid only when EveryDay<hour> is set to 1; e.g. 'EveryDay0=1' is required for EveryDay0.FromTo.</p> <p>'EveryDay=1&EveryDay18=1&EveryDay18.FromTo=12-20' means that the event operation is activated every day 6:12 PM to 6:20 PM.</p>

Action	Parameter	Request/Response	Type/Value	Description
	EventAction	REQ, RES	<csv> AlarmOutput.#, SMTP, FTP, Record, HTTP, GoToPreset, AudioClip	<p>Event action</p> <ul style="list-style-type: none"> AlarmOutput.#: Activates alarm output when the configured event occurs. SMTP: Sends notification and image as attachment via SMTP when the configured event occurs. FTP: Uploads image via FTP when the configured event occurs. Record: Saves event video on the storage device when the configured event occurs. (Refer to 'Recording' document (of recording.cgi) for configuring recording settings such as pre and post event buffers) GoToPreset: Moves to the specified preset position when the configured event occurs. AudioClip: Plays a specific audio file in the device when the configured event occurs. <p>Note transfer.cgi is used to configure FTP/SMTP server settings.</p>
	AlarmOutput.#.Duration	REQ, RES	<enum> Always, 5s, 10s, 15s, 30s, 60s, 90s, 120s, 150s, 200s	<p>Alarm output duration when the event occurs</p> <p>AlarmOutput.#.Duration is valid only when EventAction is set to AlarmOutput.# .</p>
	PresetNumber	REQ, RES	<int>	<p>Preset number</p> <p>PresetNumber is valid only when EventAction is set to GoToPreset.</p>

Action	Parameter	Request/Response	Type/Value	Description
	AudioClipIndex	REQ, RES	<int>	Audio clip index number AudioClipIndex is valid only when EventAction is set to AudioClip.
remove	RuleIndex	REQ	<int>	Index of the rule Note RuleIndex must be sent together with the remove action.

4.1.4. Examples

4.1.5. Getting the current rules

REQUEST

```
http://<Device IP>/stw-cgi/eventrules.cgi?submenu=rules&action=view
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

```
Rule.1.RuleName=AlarmInput.1
Rule.1.EventSource=AlarmInput.1
Rule.1.Enable=True
Rule.1.ScheduleType=Scheduled
Rule.1.SUN=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.1.MON=0 0 0 0 0 1 1 1 0 0 0 0 1 1 1 0 0 0 0 0 0 0
Rule.1.TUE=0 0 0 0 0 0 0 1 0 0 0 1 1 0 1 1 0 0 1 0 0 0
Rule.1.WED=0 0 0 0 0 0 0 1 1 1 1 0 0 0 1 1 1 0 1 0 0 0
Rule.1.THU=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.1.FRI=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.1.SAT=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.1.EventAction=AlarmOutput.1,SMTP,FTP,Record
Rule.1.AlarmOutput.1.Duration=Always
Rule.2.RuleName=MotionDetection
Rule.2.EventSource=MotionDetection
```

```

Rule.2.Enable=True
Rule.2.ScheduleType=Always
Rule.2.SUN=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.2.MON=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.2.TUE=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.2.WED=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.2.THU=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.2.FRI=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.2.SAT=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.2.EventAction=AlarmOutput.1,SMTP,FTP
Rule.2.AlarmOutput.1.Duration=15s
Rule.3.RuleName=NetworkEvent
Rule.3.EventSource=NetworkEvent
Rule.3.Enable=True
Rule.3.ScheduleType=Always
Rule.3.SUN=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.3.MON=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.3.TUE=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.3.WED=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.3.THU=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.3.FRI=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.3.SAT=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.3.EventAction=AlarmOutput.1,Record
Rule.3.AlarmOutput.1.Duration=10s
Rule.4.RuleName=TamperingDetection
Rule.4.EventSource=TamperingDetection
Rule.4.Enable=True
Rule.4.ScheduleType=Scheduled
Rule.4.SUN=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.4.MON=0 0 1 1 1 0 0 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.4.TUE=1 1 0 0 1 0 0 0 0 1 1 0 0 0 0 0 0 1 1 0 0 0 0
Rule.4.WED=1 0 0 0 1 0 0 0 0 0 1 0 0 0 1 1 0 1 0 1 0 0 0
Rule.4.THU=1 1 0 0 1 1 0 0 0 0 1 1 1 1 0 0 0 1 1 0 0 0 0
Rule.4.FRI=0 1 0 0 0 1 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0
Rule.4.SAT=0 0 0 0 0 0 1 1 0 1 0 1 1 0 0 0 0 0 0 0 0 0 0
Rule.4.EventAction=AlarmOutput.1,SMTP,FTP,Record
Rule.4.AlarmOutput.1.Duration=5s
Rule.5.RuleName=AudioDetection
Rule.5.EventSource=AudioDetection
Rule.5.Enable=True
Rule.5.ScheduleType=Always

```

```

Rule.5.SUN=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.5.MON=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.5.TUE=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.5.WED=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.5.THU=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.5.FRI=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.5.SAT=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.5.EventAction=AlarmOutput.1,SMTP,FTP,AudioClip
Rule.5.AlarmOutput.1.Duration=5s
Rule.6.RuleName=Timer
Rule.6.EventSource=Timer
Rule.6.Enable=True
Rule.6.ScheduleType=Scheduled
Rule.6.SUN=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.6.MON=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.6.TUE=0 0 0 0 0 0 1 1 1 0 0 0 0 1 1 0 0 0 1 1 0 1 0 0
Rule.6.WED=0 0 0 0 0 0 0 0 1 0 0 0 1 1 1 1 0 1 1 1 1 1 0 0
Rule.6.THU=0 0 0 0 0 0 0 0 1 1 0 0 1 0 0 1 1 1 0 0 0 0 0 0
Rule.6.FRI=0 0 0 0 0 0 0 0 0 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0
Rule.6.SAT=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.6.EventAction=FTP
Rule.6.AlarmOutput.1.Duration=
Rule.7.RuleName=OpenSDK
Rule.7.EventSource=OpenSDK
Rule.7.Enable=True
Rule.7.ScheduleType=Always
Rule.7.SUN=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.7.MON=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.7.TUE=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.7.WED=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.7.THU=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.7.FRI=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.7.SAT=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.7.EventAction=SMTP,FTP
Rule.7.AlarmOutput.1.Duration=
Rule.8.RuleName=DefocusDetection
Rule.8.EventSource=DefocusDetection
Rule.8.Enable=True
Rule.8.ScheduleType=Scheduled
Rule.8.SUN=0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rule.8.MON=0 1 1 1 0 0 0 1 1 1 0 0 0 0 0 0 0 1 1 0 0 1 1 0

```


[illegible]

```

    "0",
    "1",
    "0",
    "0",
    "0",
    "1",
    "1",
    "0",
    "1",
    "1",
    "0",
    "0",
    "1",
    "0",
    "0",
    "0",
    "0",
    "0",
    "0",
    "0"
],
"WED": [
    "0",
    "0",
    "0",
    "0",
    "0",
    "0",
    "0",
    "1",
    "1",
    "1",
    "1",
    "1",
    "0",
    "0",
    "0",
    "1",
    "1",
    "1",
    "0",
    "1",
    "0"
]

```

```
"0",
"0",
"0"
```

[illegible]

```

    },
    "EventAction": [
        "AlarmOutput.1",
        "SMTP",
        "FTP",
        "Record"
    ],
    "AlarmOutputs": [
        {
            "AlarmOutput": 1,
            "Duration": "Always"
        }
    ]
}
]
}

```

4.1.6. Adding a rule

Adding 'TestRule01', which detects the alarm input at all times (without a time schedule) and saves the event video to the storage device

When adding a new event rule, **RuleName** and **EventSource** must be set. In some cameras event rules are added by default, and thus there is no need to create an event rule. Update action can be used to modify default rules as needed.

REQUEST

```

http://<Device IP>/stw-
cgi/eventrules.cgi?msubmenu=rules&action=add&RuleName=TestRule01&EventSource
=AlarmInput.1&Enable=True&ScheduleType=Always&EventAction=Record

```

TEXT RESPONSE

```

HTTP/1.0 200 OK
Content-type: text/plain
<Body>

```

```

OK
RuleIndex=1

```

Adding 'TestRule02', which detects faces every Saturday and Sunday

REQUEST

```
http://<Device IP>/stw-  
cgi/eventrules.cgi?submenu=rules&action=add&EventSource=FaceDetection&RuleName=TestRule02&Enable=True&ScheduleType=Scheduled&SUN=1&SAT=1&MON=0&TUE=0&WED=0&THU=0&FRI=0
```

Adding 'TestRule03', which detects audio events from 1:00 AM to 4:00 AM everyday and saves the event video to the storage device

REQUEST

```
http://<Device IP>/stw-  
cgi/eventrules.cgi?submenu=rules&action=add&EventSource=AudioDetection&RuleName=TestRule03&Enable=True&ScheduleType=Scheduled&EveryDay=1&EveryDay1=1&EveryDay2=1&EveryDay3=1&EveryDay4=1&EventAction=Record
```

Adding 'TestRule04', which detects and records audio events every Sunday except at 2 AM and 3AM

REQUEST

```
http://<Device IP>/stw-  
cgi/eventrules.cgi?submenu=rules&action=add&EventSource=AudioDetection&RuleName=TestRule04&Enable=True&ScheduleType=Scheduled&SUN=1&SUN0=1&SUN1=1&SUN2=0&SUN3=0&SUN4=1&SUN5=1&SUN6=1&SUN7=1&SUN8=1&SUN9=1&SUN10=1&SUN11=1&SUN12=1&SUN13=1&SUN14=1&SUN15=1&SUN16=1&SUN17=1&SUN18=1&SUN19=1&SUN20=1&SUN21=1&SUN22=1&SUN23=1&EventAction=Record
```

Adding 'TestRule05', which detects audio events and records from 3:58 AM to 3:59 AM on Sundays

REQUEST

```
http://<Device IP>/stw-  
cgi/eventrules.cgi?submenu=rules&action=add&EventSource=AudioDetection&RuleName=TestRule05&Enable=True&ScheduleType=Scheduled&SUN=1&SUN3=1&SUN3.FromTo=58-59&EventAction=Record
```

Adding 'TestRule001', which produces an alarm for 5 seconds when it detects tampering

To set the alarm output duration, **EventAction** must be set to AlarmOutput.\#.

REQUEST

```
http://<Device IP>/stw-
```

```
cgi/eventrules.cgi?msubmenu=rules&action=add&EventSource=TamperingDetection&RuleName=TestRule001&Enable=True&ScheduleType=Always&EventAction=AlarmOutput.1&AlarmOutput.1.Duration=5s
```

Adding 'TestRule002', which moves the network camera to preset number 16 when camera detects face

You can set the preset number only when **EventAction** is set to GoToPreset.

REQUEST

```
http://<Device IP>/stw-cgi/eventrules.cgi?msubmenu=rules&action=add&EventSource=FaceDetection&RuleName=TestRule002&Enable=True&ScheduleType=Always&EventAction=GoToPreset&PresetNumber=16
```

Adding a rule with the OpenSDK event source

REQUEST

```
http://<Device IP>/stw-cgi/eventrules.cgi?msubmenu=rules&action=add&RuleName=ANPRRule&EventSource=OpenSDK&Enable=True&ScheduleType=Always&EventAction=FTP
```

4.1.7. Updating Rule 1

To update an existing event rule, you must indicate the **RuleIndex**.

RuleIndex is mandatory parameter for the update action. The Enable, EventSource, ScheduleType, and EventAction parameters can be updated independently when combined with RuleIndex parameter for the given rule.

REQUEST

```
http://<Device IP>/stw-cgi/eventrules.cgi?msubmenu=rules&action=update&RuleIndex=1&EventSource=MotionDetection&EventAction=AudioClip&AudioClipIndex=1
```

4.1.8. Removing Rule 1

To remove a rule with the **remove** action, the **RuleIndex** parameter must be set.

REQUEST

```
http://<Device IP>/stw-cgi/eventrules.cgi?msubmenu=rules&action=remove&RuleIndex=1
```


NOTE

Some camera models may have predefined rules which cannot be removed or added but can be only updated.

4.2. Dynamic Rules

4.2.1. Description

The **dynamicrules** submenu is used to configure rules regarding what actions to take on what channels when an event is notified.

NOTE

Attributes to check **dynamicrules** feature support:

"attributes/Eventsource/Support/DynamicRule"

Attribute to check for the maximum number of rules supported:

"attributes/Eventsource/Limit/MaxDynamicRule"

Attribute to check for the maximum number of events supported by the rule:

"attributes/Eventsource/Support/MaxDynamicRule.EventSource" Attribute to check for

the maximum number of schedules supported:

"attributes/Eventsource/Limit/MaxScheduleCount"

Access level

Action	Camera	NVR
view	Admin	User
add, update	Admin	User
remove	Admin	User

4.2.2. Syntax

```
http://<Device IP>/stw-cgi/eventrules.cgi?submenu=
dynamicrules&action=<value>[&<parameter>=<value>]
```

4.2.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view	Rule.#.RuleName	RES	<string>	Rulename used for uniquely identifying a rule.
	Rule.#.Duration	RES	<int>	Duration in seconds
	Rule.#.ScheduleName	RES	<string>	Determines which schedule is associated with the rule.
	Rule.#.Enable	RES	<bool> True, False	To enable or disable rule.

Action	Parameter	Request/ Response	Type/ Value	Description
	Rule.#.Status	RES	<enum> Unavailable, Available	Indicates the operable state of the rule. CAMERA ONLY
	Rule.#.EventSource.#. Type	RES	<enum> MotionDetection, VideoAnalytics, Tampering, DefocusDetection, FogDetection, AudioDetection, AudioAnalytics, NetworkAlarmInput, PasswordChange, HDDStatus, FANError, PowerOnOff, Recording, AppEvent, MQTTSubscription	In a single rule, there can be several eventsources configured.
	Rule.#.EventSource.#. AppName	RES	<string>	The name of the installed app Rule.#.EventSource.#.AppName is valid only when Rule.#.EventSource.#.Type is set to AppEvent . CAMERA ONLY
	Rule.#.EventSource.#. AppEventType	RES	<string>	The event source type of the installed app Rule.#.EventSource.#.AppEvent Type is valid only when Rule.#.EventSource.#.Type is set to AppEvent . CAMERA ONLY

Action	Parameter	Request/Response	Type/Value	Description
	Rule.#.EventSource.#.RuleIndexType	RES	<enum> Any, Specific	<p>Rule index of the event source type:</p> <ul style="list-style-type: none"> Any – A trigger with one or more of the event's rule indices Specific - A specific rule index of an event as a trigger <p>Note If RuleIndexType is Specific, it should be specified with the Rule.#.EventSource.#.RuleIndex parameter</p> <p>CAMERA ONLY</p>
	Rule.#.EventSource.#.RuleIndex	RES	<int>	<p>A rule index of an event as a trigger.</p> <p>Rule.#.EventSource.#.RuleIndex is valid only when Rule.#.EventSource.#.RuleIndexType is set to Specific.</p> <p>CAMERA ONLY</p>
	Rule.#.EventSource.#.Channel	RES	<int>	<p>Determines from which channel Event source type needs to be handled.</p> <p>CAMERA ONLY</p>
	Rule.#.EventSource.#.ChannelIDList	RES	<csv>	<p>Determines from which channels Event source type needs to be handled.</p> <p>NVR ONLY</p>
	Rule.#.EventSource.#.DynamicEventName	RES	<string>	<p>Dynamic event name received from the camera</p> <p>NVR ONLY</p>
	Rule.#.EventSource.#.State	RES	<bool> True, False	<p>State of the event source set as the trigger condition</p> <p>CAMERA ONLY</p>

Action	Parameter	Request/ Response	Type/ Value	Description
	Rule.#.EventAction.#. Type	RES	<enum> GoToPreset, AlarmOutput.#, SMTP, EventPush, EventSpot, FTP, AudioClip, Record, Handover, MQTTPublication	Any of the following event actions are possible; multiple event actions can be configured.
	Rule.#.EventAction.#. Channel.#.PresetNum ber	RES	<int>	Used when the event action type is GoToPreset
	Rule.#.EventAction.#. AlarmOutput.Mask	RES	<csv>	Used when the event action type is AlarmOutput NVR ONLY
	Rule.#.EventAction.#. AlarmOutput.Duratio n	RES	<enum> Off, 5s, 10s, 20s, 30s, Always	Duration of alarmout
	Rule.#.EventAction.#. SMTP.GroupIndex	RES	<int>	Used when the event action type is SMTP Recipient group index NVR ONLY
	Rule.#.EventAction.#. SMTP.UserIndex	RES	<int>	Used when the event action type is SMTP Recipient user index NVR ONLY
	Rule.#.EventAction.#. SMTP.Duration	RES	<enum> Off, 5s, 10s, 20s, 30s, Always	Duration NVR ONLY
	Rule.#.EventAction.#. EventSpot.Enable	RES	<bool> True, False	Used when the event action type is EventSpot Enabled or Disabled NVR ONLY
	Rule.#.EventAction.#. EventSpot.Duration	RES	<int>	Used when the event action type is EventSpot Duration NVR ONLY

Action	Parameter	Request/Response	Type/Value	Description
	Rule.#.EventAction.#.EventPush.Enable	RES	<bool> True, False	Used when the event action type is EventPush Enable or Disabled NVR ONLY
	Rule.#.EventAction.#.AudioClipIndex	RES	<int>	Used when the event action type is AudioClip Audio clip index CAMERA ONLY
	Rule.#.EventAction.#.HandoverIndex	RES	<int>	Used when the event action type is Handover Handover index CAMERA ONLY
	Rule.#.EventAction.#.MQTTMessageIndex	RES	<int>	Used when the event action type is MQTT publication message MQTT publication index CAMERA ONLY
add/update	RuleName	REQ	<string>	Rulename used for uniquely identifying a rule.
	RuleNewName	REQ	<string>	The Rulename to change. This parameter is used for the update action.
	Duration	REQ	<int>	Duration in seconds
	ScheduleName	REQ	<string>	Name of schedule to be associated with this rule.
	Enable	REQ	<bool> True, False	To enable or disable rule.
	Overwrite	REQ	<bool> True, False	Whether to overwrite. This parameter is used for the update action. Note If Overwrite is True , all other parameters must be entered.

Action	Parameter	Request/ Response	Type/ Value	Description
	EventSource.#.Type	REQ	<enum> MotionDetection, VideoAnalytics, Tampering, DefocusDetection, FogDetection, AudioDetection, AudioAnalytics, NetworkAlarmInput, PasswordChange, HDDStatus, FANError, PowerOnOff, Recording, AppEvent, MQTTSubscription	For a single rule, multiple eventsources can be configured.
	EventSource.#.AppName	REQ	<string>	The name of the installed app EventSource.#.AppName is valid only when EventSource.#.Type is set to AppEvent . CAMERA ONLY
	EventSource.#.AppEventType	REQ	<string>	The event source type of the installed app EventSource.#.AppEventType is valid only when EventSource.#.Type is set to AppEvent . CAMERA ONLY

Action	Parameter	Request/Response	Type/Value	Description
	EventSource.#.RuleIndexType	REQ	<enum> Any, Specific	<p>Rule index of the event source type:</p> <ul style="list-style-type: none"> Any – A trigger with one or more of the event’s rule indices Specific - A specific rule index of an event as a trigger <p>Note If RuleIndexType is Specific, it should be specified with the EventSource.#.RuleIndex parameter</p> <p>CAMERA ONLY</p>
	EventSource.#.RuleIndex	REQ	<int>	<p>A rule index of an event as a trigger.</p> <p>EventSource.#.RuleIndex is valid only when EventSource.#.RuleIndexType is set to Specific.</p> <p>CAMERA ONLY</p>
	EventSource.#.Channel	REQ	<int>	<p>Determines from which channel Event source type needs to be handled.</p> <p>CAMERA ONLY</p>
	EventSource.#.ChannelIDList	REQ	<csv>	<p>Determines from which channels Event source type needs to be handled.</p> <p>NVR ONLY</p>
	EventSource.#.DynamicEventName	REQ	<string>	<p>Dynamic event name received from Camera</p>
	EventSource.#.State	REQ	<bool> True, False	<p>Set which state of the event source to set as the trigger condition</p> <p>CAMERA ONLY</p>

Action	Parameter	Request/ Response	Type/ Value	Description
	EventAction.#.Type	REQ	<enum> GoToPreset, AlarmOutput.#, SMTP, EventPush, EventSpot, FTP, AudioClip, Record, Handover, MQTTPublication	Any of the following event actions are possible, multiple event actions can be configured.
	EventAction.#.Channel.#.PresetNumber	REQ	<int>	Used when the event action type is GoToPreset
	EventAction.#.AlarmOutput.Mask	REQ	<csv>	Used when the event action type is AlarmOutput NVR ONLY
	EventAction.#.AlarmOutput.Duration	REQ	<enum> Off, 5s, 10s, 20s, 30s, Always	Duration of alarmout
	EventAction.#.SMTP.GroupIndex	REQ	<int>	Used when the event action type is SMTP Recipient group index NVR ONLY
	EventAction.#.SMTP.UserIndex	REQ	<int>	Used when the event action type is SMTP Recipient user index NVR ONLY
	EventAction.#.SMTP.Duration	REQ	<enum> Off, 5s, 10s, 20s, 30s, Always	Duration NVR ONLY
	EventAction.#.EventSpot.Enable	REQ	<bool> True, False	Used when the event action type is EventSpot Enabled or Disabled NVR ONLY
	EventAction.#.EventSpot.Duration	REQ	<int>	Used when the event action type is EventSpot Duration NVR ONLY

Action	Parameter	Request/Response	Type/Value	Description
	EventAction.#.EventPush.Enable	REQ	<bool> True, False	Used when the event action type is EventPush Enable or Disabled NVR ONLY
	EventAction.#.AudioClipIndex	REQ	<int>	Used when the event action type is AudioClip Audio clip index CAMERA ONLY
	EventAction.#.HandoverIndex	REQ	<int>	Used when the event action type is Handover Handover index CAMERA ONLY
	EventAction.#.MQTTMessageIndex	REQ	<int>	Used when the event action type is MQTT publication message MQTT publication index CAMERA ONLY Note EventAction.#.Type should be MQTTPublication
remove	RuleName	REQ	<string>	Rule name to be deleted

4.2.4. Examples (for NVR)

4.2.5. Getting the current dynamic rules

REQUEST

```
http://<Device IP>/stw-cgi/eventrules.cgi?submenu=dynamicrules&action=view
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

```

Rule.1.RuleName=AlarmInput.1
Rule.1.EventSource=AlarmInput.1
Rule.1.Enable=True
Rule.0.RuleName=HDD Status
Rule.0.ScheduleName=Schedule1
Rule.0.Duration=3
Rule.0.Enable=True
Rule.0.EventSource.0.Type=HDDStatus
Rule.0.EventSource.0.DynamicEventName=HDD status
Rule.0.EventAction.0.Type=AlarmOutput
Rule.0.EventAction.0.AlarmOutput.Mask=Beep
Rule.0.EventAction.0.AlarmOutput.Duration=Always
Rule.1.RuleName=FAN Error
Rule.1.ScheduleName=Schedule1
Rule.1.Duration=3
Rule.1.Enable=True
Rule.1.EventSource.0.Type=FANError
Rule.1.EventSource.0.DynamicEventName=Fan failure
Rule.1.EventAction.0.Type=AlarmOutput
Rule.1.EventAction.0.AlarmOutput.Mask=Beep
Rule.1.EventAction.0.AlarmOutput.Duration=Always
Rule.2.RuleName=Motion
Rule.2.ScheduleName=Schedule1
Rule.2.Duration=3
Rule.2.Enable=False
Rule.2.EventSource.0.Type=MotionDetection
Rule.2.EventSource.0.ChannelIDList=0,1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,
17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,4
2,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63
Rule.2.EventSource.0.DynamicEventName=Motion detection
Rule.3.RuleName=ttttt
Rule.3.ScheduleName=Schedule1
Rule.3.Duration=3
Rule.3.Enable=True
Rule.3.EventSource.0.Type=VideoAnalytics
Rule.3.EventSource.0.DynamicEventName=IVA
Rule.3.EventSource.1.Type=Tampering
Rule.3.EventSource.1.DynamicEventName=Tampering
Rule.3.EventSource.2.Type=FogDetection
Rule.3.EventSource.2.DynamicEventName=Fog detection
Rule.3.EventAction.0.Type=AlarmOutput

```

```
Rule.3.EventAction.0.AlarmOutput.Mask=1,2,3,4
Rule.3.EventAction.0.AlarmOutput.Duration=None
Rule.3.EventAction.1.Type=EventPush
Rule.3.EventAction.1.EventPush.Enable=True
Rule.3.EventAction.2.Type=EventSpot
Rule.3.EventAction.2.EventSpot.Enable=True
Rule.3.EventAction.2.EventSpot.Duration=5s
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "Rules": [
    {
      "Rule": 0,
      "RuleName": "HDD Status",
      "ScheduleName": "Schedule1",
      "Duration": 3,
      "Enable": true,
      "EventSources": [
        {
          "EventSource": 0,
          "Type": "HDDStatus",
          "ChannelIDList": [],
          "DynamicEventName": "HDD status"
        }
      ],
      "EventActions": [
        {
          "EventAction": 0,
          "Type": "AlarmOutput",
          "AlarmOutput": {
            "Mask": [
              "Beep"
            ],
            "Duration": "Always"
          }
        }
      ]
    }
  ]
}
```

```

    ]
  },
  {
    "Rule": 1,
    "RuleName": "FAN Error",
    "ScheduleName": "Schedule1",
    "Duration": 3,
    "Enable": true,
    "EventSources": [
      {
        "EventSource": 0,
        "Type": "FANError",
        "ChannelIDList": [],
        "DynamicEventName": "Fan failure"
      }
    ],
    "EventActions": [
      {
        "EventAction": 0,
        "Type": "AlarmOutput",
        "AlarmOutput": {
          "Mask": [
            "Beep"
          ],
          "Duration": "Always"
        }
      }
    ]
  },
  {
    "Rule": 2,
    "RuleName": "Motion",
    "ScheduleName": "Schedule1",
    "Duration": 3,
    "Enable": false,
    "EventSources": [
      {
        "EventSource": 0,
        "Type": "MotionDetection",
        "ChannelIDList": [
          "0",

```

"1",
"2",
"3",
"4",
"5",
"6",
"7",
"8",
"9",
"10",
"11",
"12",
"13",
"14",
"15",
"16",
"17",
"18",
"19",
"20",
"21",
"22",
"23",
"24",
"25",
"26",
"27",
"28",
"29",
"30",
"31",
"32",
"33",
"34",
"35",
"36",
"37",
"38",
"39",
"40",
"41",

```

        "42",
        "43",
        "44",
        "45",
        "46",
        "47",
        "48",
        "49",
        "50",
        "51",
        "52",
        "53",
        "54",
        "55",
        "56",
        "57",
        "58",
        "59",
        "60",
        "61",
        "62",
        "63"
    ],
    "DynamicEventName": "Motion detection"
}
],
"EventActions": []
},
{
    "Rule": 3,
    "RuleName": "ttttt",
    "ScheduleName": "Schedule1",
    "Duration": 3,
    "Enable": true,
    "EventSources": [
        {
            "EventSource": 0,
            "Type": "VideoAnalytics",
            "ChannelIDList": [],
            "DynamicEventName": "IVA"
        },

```

```

    {
      "EventSource": 1,
      "Type": "Tampering",
      "ChannelIDList": [],
      "DynamicEventName": "Tampering"
    },
    {
      "EventSource": 2,
      "Type": "FogDetection",
      "ChannelIDList": [],
      "DynamicEventName": "Fog detection"
    }
  ],
  "EventActions": [
    {
      "EventAction": 0,
      "Type": "AlarmOutput",
      "AlarmOutput": {
        "Mask": [
          "1",
          "2",
          "3",
          "4"
        ],
        "Duration": "None"
      }
    },
    {
      "EventAction": 1,
      "Type": "EventPush",
      "EventPush": {
        "Enable": "True"
      }
    },
    {
      "EventAction": 2,
      "Type": "EventSpot",
      "EventSpot": {
        "Enable": "True",
        "Duration": "5s"
      }
    }
  ]
}
```

```

    }
  ]
}

```

4.2.6. Adding a dynamic rule

Adding a new dynamic rule with Rule name ABCD and several event sources; PasswordChange, CamAllEvent, PowerOnOff.

REQUEST

```

http://<Device IP>/stw-
cgi/eventrules.cgi?submenu=dynamicrules&action=add&RuleName=ABCD&Enable=False&ScheduleName=Schedule1&Duration=45&EventSource.0.Type=PasswordChange&EventSource.1.Type=CamAllEvent&EventSource.2.Type=PowerOnOff&EventSource.1.ChannelIDList=40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63&EventAction.0.Type=AlarmOutput&EventAction.0.AlarmOutput.Mask=1,2,3,BEEP&EventAction.0.AlarmOutput.Duration=Always&EventAction.2.Type=GoToPreset&EventAction.2.Channel.1.PresetNumber=0

```

TEXT RESPONSE

```

HTTP/1.0 200 OK
Content-type: text/plain
<Body>

```

```

OK

```

JSON RESPONSE

```

HTTP/1.0 200 OK
Content-type: application/json
<Body>

```

```

{
  "Response": "Success"
}

```


4.2.7. Updating Dynamic Rule

To update an existing event rule, you must indicate the RuleName.

NOTE | The camera only supports JSON responses.

REQUEST

```
http://<Device IP>/stw-  
cgi/eventrules.cgi?submenu=dynamicrules&action=update&RuleName=ABCD&Enable=  
True&EventAction.2.Type=EventPush&EventAction.2.EventPush.Enable=True
```

TEXT RESPONSE

```
HTTP/1.0 200 OK  
Content-type: text/plain  
<Body>
```

```
OK
```

JSON RESPONSE

```
HTTP/1.0 200 OK  
Content-type: application/json  
<Body>
```

```
{  
  "Response": "Success"  
}
```

4.2.8. Removing Dynamic Rule

To remove a rule with the **remove** action and by passing the RuleName

REQUEST

```
http://<Device IP>/stw-  
cgi/eventrules.cgi?submenu=dynamicrules&action=remove&RuleName=ABCD
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
```

```
Content-type: text/plain
<Body>
```

OK

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "Response": "Success"
}
```

4.2.9. Examples (for Camera)

4.2.10. Getting the current dynamic rules

NOTE | The camera only supports JSON responses.

REQUEST

```
http://<Device IP>/stw-cgi/eventrules.cgi?submenu=dynamicrules&action=view
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "Rules": [
    {
      "Rule": 0,
      "RuleName": "Test",
      "ScheduleName": "Always",
      "Duration": 5,
      "Enable": true,
      "Status": "Unavailable",

```

```

    "EventSources": [
      {
        "EventSource": 0,
        "Type": "MotionDetection",
        "RuleIndexType": "Any",
        "Channel": 1,
        "State": true
      },
      {
        "EventSource": 1,
        "Type": "AppEvent",
        "AppName": "WiseAI",
        "AppEventType": "ObjectDetection",
        "RuleIndexType": "Any",
        "Channel": 0,
        "State": true
      },
      {
        "EventSource": 2,
        "Type": "AppEvent",
        "AppName": "WiseAI",
        "AppEventType": "IvaArea",
        "RuleIndexType": "Specific",
        "RuleIndex": 1,
        "Channel": 0,
        "State": true
      }
    ],
    "EventActions": [
      {
        "EventAction": 0,
        "Type": "SMTP"
      }
    ]
  },
  {
    "Rule": 1,
    "RuleName": "test2",
    "ScheduleName": "Always",
    "Duration": 60,
    "Enable": true,

```

```

        "Status": "Unavailable",
        "EventSources": [
            {
                "EventSource": 0,
                "Type": "AlarmInput.1",
                "RuleIndexType": "Any",
                "Channel": 0,
                "State": true
            },
            {
                "EventSource": 1,
                "Type": "TamperingDetection",
                "RuleIndexType": "Any",
                "Channel": 0,
                "State": true
            },
            {
                "EventSource": 2,
                "Type": "DefocusDetection",
                "RuleIndexType": "Any",
                "Channel": 0,
                "State": true
            }
        ],
        "EventActions": []
    }
]
}

```

4.2.11. Adding a dynamic rule

Adding a new dynamic rule with Rule name 'Test' and several event sources; MotionDetection, IvaArea and ObjectDetection of WiseAI app's event.

NOTE

The camera should see a list of supported events and actions via the **dynamicrulesoptions** submenu.
The camera only supports JSON responses.

REQUEST

```

http://<Device IP>/stw-
cgi/eventrules.cgi?submenu=dynamicrules&action=add&RuleName=Test&ScheduleNa
me=Always&Enable=True&Duration=5&EventSource.0.Type=MotionDetection&EventSou

```

```
rice.0.RuleIndexType=Specific&EventSource.0.RuleIndex=1&EventSource.0.Channel=1&EventSource.0.State=True&EventSource.1.Type=AppEvent&EventSource.1.AppName=WiseAI&EventSource.1.AppEventType=IvaArea&EventSource.1.RuleIndexType=Any&EventSource.1.Channel=0&EventSource.1.State=False&EventSource.2.Type=AppEvent&EventSource.2.AppName=WiseAI&EventSource.2.AppEventType=ObjectDetection&EventSource.2.RuleIndexType=Any&EventSource.2.Channel=0&EventSource.2.State=True&EventAction.0.Type=SMTP&EventAction.1.Type=Handover&EventAction.1.HandoverIndex=1
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "Response": "Success"
}
```

4.2.12. Updating Dynamic Rule

To update an existing event rule, you must indicate the RuleName.

NOTE | The camera only supports JSON responses.

REQUEST

```
http://<Device IP>/stw-
cgi/eventrules.cgi?submenu=dynamicrules&action=update&RuleName=Test&RuleNew
Name=Test2&Enable=True&EventAction.0.Type=FTP
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "Response": "Success"
}
```

4.2.13. Removing Dynamic Rule

To remove a rule with the **remove** action and by passing the RuleName

NOTE | The camera only supports JSON responses.

REQUEST

```
http://<Device IP>/stw-  
cgi/eventrules.cgi?submenu=dynamicrules&action=remove&RuleName=Test
```

JSON RESPONSE

```
HTTP/1.0 200 OK  
Content-type: application/json  
<Body>
```

```
{  
  "Response": "Success"  
}
```

4.3. Dynamic Rules Options

4.3.1. Description

The **dynamicrulesoptions** submenu provides a list of available event sources and information about their action triggers, that can be used in the **dynamicrules** submenu. Event sources and event actions that are not activated do not appear in the list and cannot be added to rules in the **dynamicrules** submenu

NOTE | This chapter applies to network cameras only.

Access level

Action	Camera
view	Admin

4.3.2. Syntax

```
http://<Device IP>/stw-cgi/eventrules.cgi?submenu=  
dynamicrulesoptions&action=<value> [&<parameter>=<value>]
```

4.3.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view	Channel	REQ, RES	<csv>	Channel ID
	Language	REQ	<enum>	Language of the interface to the event type
	EventSource.#.Type	RES	<string>	Event types provided by the device
	EventSource.#.Type_<Language>	RES	<string>	Interface language data for the language selected in the Language parameter Displayed only when the Language parameter is specified
	EventSource.#.Status	RES	<enum> Inactive, Active	Indicates whether the event is currently active
	EventSource.#.Policy	RES	<enum> OneShot, Property	Indicates the event policy
	EventSource.#.Action Types	RES	<csv> GoToPreset, AlarmOutput.#, SMTP, EventPush, EventSpot, FTP, AudioClip, Record, Handover, MQTTPublication	Event action types provided by the device
	EventSource.#.Rule.#.Name	RES	<string>	The name of the rule in the event
	AppEventSource.#.App pName	RES	<string>	The name of the app installed through the device's opensdk
	AppEventSource.#.Type	RES	<string>	Event types provided the opensdk app of the device
	AppEventSource.#.Type_<Language>	RES	<string>	Interface language data for the language selected in the Language parameter Displayed only when the Language parameter is specified
	AppEventSource.#.Status	RES	<enum> Inactive, Active	Indicates whether the event of the app is currently active

Action	Parameter	Request/Response	Type/Value	Description
	AppEventSource.#.Policy	RES	<enum> OneShot, Property	'Oneshot' means this event doesn't support "EventSource.#.State" in the dynamicrules submenu. On the other side, 'Property' means the opposite.
	AppEventSource.#.ActionTypes	RES	<csv> GoToPreset, AlarmOutput.#, SMTP, EventPush, EventSpot, FTP, AudioClip, Record, Handover, MQTTPublication	Event types provided by the device for the event source of the app
	AppEventSource.#.Rule.#.Name	RES	<string>	The name of the rule in the event of the app

4.3.4. Examples

4.3.5. Getting the current dynamic rules options (this submenu supports only JSON responses)

REQUEST

```
http://<Device IP>/stw-  
cgi/eventrules.cgi?msubmenu=dynamicrulesoptions&action=view
```

JSON RESPONSE

```
HTTP/1.0 200 OK  
Content-type: application/json  
<Body>
```

```
{  
  "DynamicRulesOptions": [  
    {  
      "Channel": 0,  
      "EventSources": [  
        {  
          "Type": "AlarmInput.1",  
          "Status": "Active",  
          "ActionTypes": [  

```



```

        "AlarmOutput.1",
        "AlarmOutput.2",
        "SMTP",
        "FTP",
        "Record",
        "Handover"
    ]
},
{
    "Type": "AlarmInput.2",
    "Status": "Active",
    "ActionTypes": [
        "AlarmOutput.1",
        "AlarmOutput.2",
        "SMTP",
        "FTP",
        "Record",
        "Handover"
    ]
},
{
    "Type": "AudioAnalysis",
    "Status": "Inactive",
    "ActionTypes": [
        "AlarmOutput.1",
        "AlarmOutput.2",
        "SMTP",
        "FTP",
        "Record",
        "Handover"
    ]
},
{
    "Type": "AudioDetection",
    "Status": "Inactive",
    "ActionTypes": [
        "AlarmOutput.1",
        "AlarmOutput.2",
        "SMTP",
        "FTP",
        "Record",

```

```

        "Handover"
    ]
},
{
    "Type": "DefocusDetection",
    "Status": "Inactive",
    "ActionTypes": [
        "AlarmOutput.1",
        "AlarmOutput.2",
        "SMTP",
        "FTP",
        "Record",
        "Handover"
    ]
},
{
    "Type": "MotionDetection",
    "Status": "Active",
    "ActionTypes": [
        "AlarmOutput.1",
        "AlarmOutput.2",
        "SMTP",
        "FTP",
        "Record",
        "Handover"
    ]
},
{
    "Type": "NetworkDisconnect",
    "Status": "Active",
    "ActionTypes": [
        "AlarmOutput.1",
        "AlarmOutput.2",
        "Record"
    ]
},
{
    "Type": "TamperingDetection",
    "Status": "Active",
    "ActionTypes": [
        "AlarmOutput.1",

```

```

        "AlarmOutput.2",
        "SMTP",
        "FTP",
        "Record",
        "Handover"
    ]
},
{
    "Type": "Timer",
    "Status": "Inactive",
    "ActionTypes": [
        "AlarmOutput.1",
        "AlarmOutput.2",
        "SMTP",
        "FTP",
        "Record",
        "Handover"
    ]
}
],
"AppEventSources": [
    {
        "Type": "IvaArea",
        "Status": "Active",
        "AppName": "WiseAI",
        "Rule": [
            {
                "Rule": 1,
                "Name": "name 1"
            },
            {
                "Rule": 2,
                "Name": "name 2"
            }
        ]
    },
    "ActionTypes": [
        "AlarmOutput.1",
        "AlarmOutput.2",
        "SMTP",
        "FTP",
        "Record",

```

```

        "Handover"
    ]
},
{
    "Type": "LineCrossing",
    "Status": "Active",
    "AppName": "WiseAI",
    "Rule": [
        {
            "Rule": 1,
            "Name": "name 1"
        }
    ],
    "ActionTypes": [
        "AlarmOutput.1",
        "AlarmOutput.2",
        "SMTP",
        "FTP",
        "Record",
        "Handover"
    ]
},
{
    "Type": "ObjectDetection",
    "Status": "Active",
    "AppName": "WiseAI",
    "ActionTypes": [
        "AlarmOutput.1",
        "AlarmOutput.2",
        "SMTP",
        "FTP",
        "Record",
        "Handover"
    ]
}
]
},
{
    "Channel": 1,
    "EventSources": [
        {

```

```

    "Type": "DefocusDetection",
    "Status": "Inactive",
    "ActionTypes": [
        "AlarmOutput.1",
        "AlarmOutput.2",
        "SMTP",
        "FTP",
        "Record",
        "Handover"
    ]
},
{
    "Type": "MotionDetection",
    "Status": "Active",
    "ActionTypes": [
        "AlarmOutput.1",
        "AlarmOutput.2",
        "SMTP",
        "FTP",
        "Record",
        "Handover"
    ]
},
{
    "Type": "TamperingDetection",
    "Status": "Inactive",
    "ActionTypes": [
        "AlarmOutput.1",
        "AlarmOutput.2",
        "SMTP",
        "FTP",
        "Record",
        "Handover"
    ]
}
],
"AppEventSources": [
    {
        "Type": "IvaArea",
        "Status": "Active",
        "AppName": "WiseAI",

```

```

    "Rule": [
      {
        "Rule": 1,
        "Name": "name 1"
      }
    ],
    "ActionTypes": [
      "AlarmOutput.1",
      "AlarmOutput.2",
      "SMTP",
      "FTP",
      "Record",
      "Handover"
    ]
  },
  {
    "Type": "LineCrossing",
    "Status": "Active",
    "AppName": "WiseAI",
    "Rule": [
      {
        "Rule": 1,
        "Name": "name 1"
      }
    ],
    "ActionTypes": [
      "AlarmOutput.1",
      "AlarmOutput.2",
      "SMTP",
      "FTP",
      "Record",
      "Handover"
    ]
  },
  {
    "Type": "ObjectDetection",
    "Status": "Inactive",
    "AppName": "WiseAI",
    "ActionTypes": [
      "AlarmOutput.1",
      "AlarmOutput.2",

```

```

        "SMTP",
        "FTP",
        "Record",
        "Handover"
    ]
}
]
}
]
}

```

4.4. Handover

4.4.1. Description

The handover feature allows the user to redirect to the preset for the inter-operation of the PTZ camera(s) when motion or a video analytics, tampering, or audio analysis event occurs. The **handover2** submenu configures the receiver (PTZ) cameras to which the user will be redirected when motion or a video analytics, tampering, or audio analysis event occurs.

NOTE | This chapter applies to network cameras and encoder only.

Access level

Action	Camera	Encoder
view	Admin	Admin
set	Admin	Admin
add/update	Admin	Admin
remove	Admin	Admin

4.4.2. Syntax

```

http://<Device IP>/stw-cgi/eventrules.cgi?msubmenu=
handover&action=<value>[&<parameter>=<value>]

```

4.4.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads handover settings
	Channel	REQ, RES	<int>	Channel ID

Action	Parameter	Request/ Response	Type/ Value	Description
	ROIIndex	REQ, RES	<int>	Index of ROI(Region of Interest)
	PresetIndex	REQ	<csv> All , #	Index of the preset: <ul style="list-style-type: none"> • All – Get handover information for all presets • # - Get handover information for specific preset <div> Note PresetIndex parameter is valid only for PTZ cameras. For PTZ cameras, PresetIndex is not passed in view action; camera provides global handover information. </div>
set	Channel	REQ, RES	<int>	Channel ID
	PresetIndex	REQ, RES	<int>	Index of the preset <div> Note PresetIndex parameter is valid only for PTZ cameras. </div>
	ROIIndex	REQ, RES	<int>	Index of ROI(Region of Interest)
	Enable	REQ, RES	<bool> True, False	Enable or disable handover for the specified ROI <div> Note ROIIndex should be sent along with Enable parameter. For PTZ cameras, PresetIndex and ROIIndex should be sent along with Enable parameter. </div>
add/update	Channel	REQ, RES	<int>	Channel ID
	PresetIndex	REQ, RES	<int>	Index of the preset <div> Note PresetIndex parameter is valid only for PTZ cameras. </div>
	ROIIndex	REQ, RES	<int>	Index of ROI(Region of Interest)

Action	Parameter	Request/ Response	Type/ Value	Description
	HandoverIndex	REQ, RES	<int>	Index of receiver camera Note ROIIndex should be sent along with HandoverIndex parameter. For PTZ cameras, PresetIndex and ROIIndex should be sent along with HandoverIndex parameter.
	IPType	REQ, RES	<enum> IPV4, IPV6	IP Type of receiver camera
	IPAddress	REQ, RES	<string> <formatInfo="IPv4Address or IPv6Address">	IP Address of receiver camera
	Port	REQ, RES	<int>	Port of receiver camera
	Username	REQ, RES	<string>	User name of receiver camera
	Password	REQ, RES	<string>	Password of receiver camera
	PresetNumber	REQ, RES	<int>	Preset number of receiver camera
	IsPasswordEncrypted	REQ	<bool> True, False	Enables or disables password encryption for receiver camera
remove	Channel	REQ	<int>	Channel ID
	PresetIndex	REQ	<int>	Index of the preset
	ROIIndex	REQ	<int>	Index of ROI(Region of Interest) to be deleted
	HandoverIndex	REQ	<csv>	Index of receiver camera to be deleted

4.4.4. Examples

4.4.5. Getting handover settings for Channel 0

REQUEST

```
http://<Device IP>/stw-cgi/eventrules.cgi?submenu=handover&action=view
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
```

Content-type: text/plain

<Body>

```
Channel.0.ROIIndex.1.Enable=False
Channel.0.ROIIndex.1.HandoverIndex.1.IPType=IPv4
Channel.0.ROIIndex.1.HandoverIndex.1.IPAddress=1.1.1.10
Channel.0.ROIIndex.1.HandoverIndex.1.Port=80
Channel.0.ROIIndex.1.HandoverIndex.1.Username=admin12
Channel.0.ROIIndex.1.HandoverIndex.1.Password=432134
Channel.0.ROIIndex.1.HandoverIndex.1.PresetNumber=1
Channel.0.ROIIndex.2.Enable=False
```

JSON RESPONSE

HTTP/1.0 200 OK

Content-type: application/json

<Body>

```
{
  "Handover": [
    {
      "Channel": 0,
      "HandoverList": [
        {
          "ROIIndex": 1,
          "Enable": false,
          "UserList": [
            {
              "HandoverIndex": 1,
              "IPType": "IPv4",
              "IPAddress": "1.1.1.10",
              "Port": 80,
              "Username": "admin12",
              "Password": "432134",
              "PresetNumber": 1
            }
          ]
        },
        {
          "ROIIndex": 2,
```

```

        "Enable": false,
        "UserList": []
    }
]
}
}

```

NOTE

PTZ camera supports both global handover and preset-based handover. To get the preset-based handover list, PresetIndex should be passed in view action.

REQUEST

```

http://<Device IP>/stw-
cgi/eventrules.cgi?submenu=handover&action=view&PresetIndex=1

```

TEXT RESPONSE

```

HTTP/1.0 200 OK
Content-type: text/plain
<Body>

```

```

Channel.0.PresetIndex.1.ROIIndex.1.Enable=False
Channel.0.PresetIndex.1.ROIIndex.1.HandoverIndex.1.IPType=IPv4
Channel.0.PresetIndex.1.ROIIndex.1.HandoverIndex.1.IPAddress=1.1.1.1
Channel.0.PresetIndex.1.ROIIndex.1.HandoverIndex.1.Port=80
Channel.0.PresetIndex.1.ROIIndex.1.HandoverIndex.1.Username=admin
Channel.0.PresetIndex.1.ROIIndex.1.HandoverIndex.1.Password=4321
Channel.0.PresetIndex.1.ROIIndex.1.HandoverIndex.1.PresetNumber=1

```

JSON RESPONSE

```

HTTP/1.0 200 OK
Content-type: application/json
<Body>

```

```

{
  "Handover": [
    {
      "Channel": 0,

```

```

    "PresetList": [
      {
        "PresetIndex": 1,
        "HandoverList": [
          {
            "ROIIndex": 1,
            "Enable": false,
            "UserList": [
              {
                "HandoverIndex": 1,
                "IPType": "IPv4",
                "IPAddress": "1.1.1.1",
                "Port": 80,
                "Username": "admin",
                "Password": "4321",
                "PresetNumber": 1
              }
            ]
          }
        ]
      }
    ]
  }
}

```

4.4.6. Setting handover

Enabling MD handover for region 1

REQUEST

```

http://<Device IP>/stw-
cgi/eventrules.cgi?submenu=handover&action=set&ROIIndex=1&Enable=True

```

For PTZ cameras, PresetIndex should be passed along with ROIIndex to enable preset-based MD handover.

REQUEST

```

http://<Device IP>/stw-cgi/eventrules.cgi?submenu=handover&action=set&
&PresetIndex=1&ROIIndex=1&Enable=True

```

NOTE

PTZ camera supports both Global MD handover & Preset-based MD handover.

4.4.7. Configuring receiver camera(s)

A receiver camera can be added to the MD ROI by providing the IPType, IPAddress, Port, Username, Password, and PresetNumber of the receiver camera.

REQUEST

```
http://<Device IP>/stw-  
cgi/eventrules.cgi?submenu=handover&action=add&PresetIndex=1&ROIIndex=1&IPT  
ype=IPv4&IPAddress=1.1.1.1&Port=80&Username=admin&Password=4321&PresetNumber  
=1
```

For PTZ cameras, **PresetIndex** should be passed along with ROIIndex while adding receiver camera for preset based MD handover.

REQUEST

```
http://<Device IP>/stw-  
cgi/eventrules.cgi?submenu=handover&action=add&PresetIndex=1&ROIIndex=1&IPT  
ype=IPv4&IPAddress=1.1.1.1&Port=80&Username=admin&Password=4321&PresetNumber  
=1
```

HandoVerIndex is used to update receiver camera details to specific MD ROI.

REQUEST

```
http://<Device IP>/stw-  
cgi/eventrules.cgi?submenu=handover&action=update&PresetIndex=1&ROIIndex=1&  
HandoverIndex=1&IPType=IPv4&IPAddress=1.1.1.2&Port=80&Username=admin&Passwor  
d=4321&PresetNumber=1
```

4.4.8. Removing receiver camera(s)

HandoverIndex is used to remove Receiver camera from the specific MD ROI.

REQUEST

```
http://<Device IP>/stw-cgi/eventrules.cgi?submenu=handover&action=remove&  
&ROIIndex=1
```

For PTZ cameras, **PresetIndex** should be passed along with ROIIndex while removing receiver camera from preset-based MD handover.

REQUEST

```
http://<Device IP>/stw-cgi/eventrules.cgi?msubmenu=handover&action=remove&
&ROIIndex=1&PresetIndex=1
```

4.5. Handover 2

4.5.1. Description

The 'handover2' feature allows the user to redirect to the preset for the inter-operation of PTZ camera(s) when motion or video analytics or a tampering or audio analysis event occurs. The **handover2** submenu configures the receiver (PTZ) cameras to which the user will be redirected when a motion or video analytics or a tampering or audio analysis event occurs.

NOTE

This chapter applies to network cameras and encoder only.
Attributes to check handover2 feature support: stw-cgi/attributes.cgi/eventrules/handover2

Access level

Action	Camera	Encoder
view	Admin	Admin
set	Admin	Admin
add/update	Admin	Admin
remove	Admin	Admin

4.5.2. Syntax

```
http://<Device IP>/stw-cgi/eventrules.cgi?msubmenu=
handover2&action=<value> [&<parameter>=<value>]
```

4.5.3. Parameters

Action	Parameter	Request/Response	Type/Value	Description
view				Reads handover settings
	Channel	REQ, RES	<int>	Channel ID
add/update	Channel	REQ, RES	<int>	Channel ID
	HandoverIndex	REQ, RES	<int>	Index of receiver camera

Action	Parameter	Request/ Response	Type/ Value	Description
	IPType	REQ, RES	<enum> IPV4, IPV6, DomainName	IP Type of receiver camera
	IPAddress	REQ, RES	<string> <formatInfo="IPv4Address or IPv6Addresses">	IP Address of receiver camera
	Port	REQ, RES	<int>	Port of receiver camera
	ConnectionMode	REQ, RES	<enum> HTTP, HTTPS, TCP	Type of handover target connection
	Username	REQ, RES	<string>	User name of receiver camera
	Password	REQ, RES	<string>	Password of receiver camera
	Action	REQ, RES	<enum> Preset, Custom	Action type of handover <ul style="list-style-type: none"> • Preset : Request to move to the preset • Custom: In case of HTTP/HTTPS, request the set URL + Query. In case of TCP, send a message.
	PresetNumber	REQ, RES	<int>	Preset number of receiver camera
	Query	REQ, RES	<string>	Available only for HTTP/HTTPS. Query string to request in URL
	Message	REQ, RES	<string>	Available only for TCP. Message to be transmitted over TCP
	IsPasswordEncrypted	REQ	<bool> True, False	Enables or disables password encryption for receiver camera
	ConnectionMode	REQ, RES	<enum> HTTP, HTTPS	Connection mode to connect receiver camera
remove	Channel	REQ	<int>	Channel ID
	HandoverIndex	REQ	<csv>	Index of receiver camera to be deleted

4.5.4. Examples

4.5.5. Getting handover2 settings for channel 0

REQUEST

```
http://<Device IP>/stw-cgi/eventrules.cgi?submenu=handover2&action=view
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "Handover": [
    {
      "Channel": 0,
      "UserList": [
        {
          "HandoverIndex": 1,
          "IPType": "IPv4",
          "IPAddress": "1.1.1.1",
          "Port": 80,
          "ConnectionMode": "HTTP",
          "Username": "admin",
          "Password": "",
          "HandoverAction": "Preset",
          "PresetNumber": 1
        },
        {
          "HandoverIndex": 2,
          "IPType": "IPv4",
          "IPAddress": "1.1.1.1",
          "Port": 80,
          "ConnectionMode": "HTTP",
          "Username": "admin",
          "Password": "",
          "HandoverAction": "Custom",
          "Query": "test"
        },
        {
          "HandoverIndex": 3,
          "IPType": "IPv4",
```



```

        "IPAddress": "1.1.1.1",
        "Port": 80,
        "ConnectionMode": "HTTPS",
        "Username": "admin",
        "Password": "",
        "HandoverAction": "Preset",
        "PresetNumber": 2
    },
    {
        "HandoverIndex": 4,
        "IPType": "IPv4",
        "IPAddress": "1.1.1.1",
        "Port": 80,
        "ConnectionMode": "HTTPS",
        "Username": "admin",
        "Password": "",
        "HandoverAction": "Custom",
        "Query": "test123"
    },
    {
        "HandoverIndex": 5,
        "IPType": "IPv4",
        "IPAddress": "192.168.111.200",
        "Port": 80,
        "ConnectionMode": "TCP",
        "HandoverAction": "Custom",
        "Message": "test!"
    }
]
}

```

4.5.6. Configuring receiver camera(s)

A receiver camera can be added by providing the IPType, IPAddress, Port, Username, Password, and PresetNumber of the receiver camera along with **HandoverIndex**, **IsPasswordEncrypted** parameters.

REQUEST

```

http://<Device IP>/stw-
cgi/eventrules.cgi?msubmenu=handover2&action=add&Channel=0&HandoverIndex=5&I

```

```
PType=IPv4&IPAddress=192.168.75.79&Port=80&Username=admin&PresetNumber=120&IsPasswordEncrypted=False
```

4.5.7. Configuring TCP receiver camera(s)

ConnectionMode must be set to TCP and a **Message** string is required.

REQUEST

```
http://<Device IP>/stw-cgi/eventrules.cgi?msubmenu=handover2&action=add&Channel=0&HandoverIndex=7&ConnectionMode=TCP&IPType=IPv4&IPAddress=1.1.1.1&Port=80&Message=handoverViaTCP
```

4.5.8. Removing receiver camera(s)

HandoverIndex is used to remove Receiver Camera at specified index.

REQUEST

```
http://<Device IP>/stw-cgi/eventrules.cgi?msubmenu=handover2&action=remove&HandoverIndex=1
```

4.6. Scheduler

4.6.1. Description

The **scheduler** submenu configures the schedule settings for report generation for people count and heat map.

NOTE | This chapter applies to network cameras only.

Access level

Action	Camera
view	Admin
set	Admin

4.6.2. Syntax

```
http://<Device IP>/stw-cgi/eventrules.cgi?msubmenu=scheduler&action=<value> [&<parameter>=<value>]
```

4.6.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads scheduler settings
	Channel	REQ, RES	<int>	Channel ID
	Type	REQ, RES	<enum> PeopleCou nt, HeatMap, QueueMan agement	Feature Type
set	Channel	REQ, RES	<int>	Channel ID
	Type	REQ, RES	<enum> PeopleCou nt, HeatMap, QueueMan agement	Feature Type
	ScheduleType	REQ, RES	<enum> Daily, Weekly	Type of schedule.
	WeekDay	REQ, RES	<enum> SUN, MON, TUE, WED, THU, FRI, SAT	Day of the week <div> Note This parameter is valid only when ScheduleType set to Weekly. </div>
	Hour	REQ, RES	<int>	Hour of the day
	Minute	REQ, RES	<int>	Minute at which report will be generated

Action	Parameter	Request/Response	Type/Value	Description
	EventAction	REQ, RES	<csv> AlarmOutput.#, SMTP, FTP, Record, HTTP, GoToPreset	<p>Event action</p> <ul style="list-style-type: none"> AlarmOutput.#: Activates alarm output when the configured event occurs. SMTP: Sends notification and image as an attachment via SMTP when the configured event occurs. FTP: Uploads image via FTP when the configured event occurs. Record: Saves event video on the storage device when the configured event occurs. (Refer to 'Recording' document (of recording.cgi) for information on configuring recording settings such as pre and post event buffers) GoToPreset: Moves to the specified preset position when the configured event occurs. <p>Note transfer.cgi is used to configure FTP/SMTP server settings.</p>
	AlarmOutput.#.Duration	REQ, RES	<enum> Always, 5s, 10s, 15s	<p>Alarm output duration when the event occurs</p> <p>AlarmOutput.#.Duration is valid only when EventAction is set to AlarmOutput.</p>

4.6.4. Examples

4.6.5. Getting scheduler settings

For people count

REQUEST

```
http://<Device IP>/stw-  
cgi/eventrules.cgi?msubmenu=scheduler&action=view&Type=PeopleCount
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

```
Channel.0.PeopleCount.ScheduleType=Daily
Channel.0.PeopleCount.Hour=11
Channel.0.PeopleCount.Minute=00
Channel.0.PeopleCount.WeekDay=SUN
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "PeopleCount": [
    {
      "Channel": 0,
      "ScheduleType": "Daily",
      "Hour": 11,
      "Minute": 0,
      "WeekDay": "SUN"
    }
  ]
}
```

For heat map

REQUEST

```
http://<Device IP>/stw-
cgi/eventrules.cgi?submenu=scheduler&action=view&Type=HeatMap
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
```

```
<Body>
```

```
Channel.0.HeatMap.ScheduleType=Daily  
Channel.0.HeatMap.Hour=06  
Channel.0.HeatMap.Minute=30  
Channel.0.HeatMap.WeekDay=SUN
```

JSON RESPONSE

```
HTTP/1.0 200 OK  
Content-type: application/json  
<Body>
```

```
{  
  "HeatMap": [  
    {  
      "Channel": 0,  
      "ScheduleType": "Daily",  
      "Hour": 6,  
      "Minute": 30,  
      "WeekDay": "SUN"  
    }  
  ]  
}
```

For queue management

REQUEST

```
http://<Device IP>/stw-  
cgi/eventrules.cgi?msubmenu=scheduler&action=view&Type=QueueManagement
```

TEXT RESPONSE

```
HTTP/1.0 200 OK  
Content-type: text/plain  
<Body>
```

```
Channel.0.QueueManagement.ScheduleType=Daily
```

```
Channel.0.QueueManagement.Hour=00
Channel.0.QueueManagement.Minute=00
Channel.0.QueueManagement.WeekDay=SUN
Channel.0.EventAction=AlarmOutput.1,SMTP,FTP
Channel.0.AlarmOutput.1.Duration=10s
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "QueueManagement": [
    {
      "Channel": 0,
      "ScheduleType": "Daily",
      "Hour": 0,
      "Minute": 0,
      "WeekDay": "SUN",
      "EventAction": [
        "AlarmOutput.1",
        "SMTP",
        "FTP"
      ],
      "AlarmOutputs": [
        {
          "AlarmOutput": 1,
          "Duration": "10s"
        }
      ]
    }
  ]
}
```

PTZ camera supports both global handover and preset-based handover. To get the preset-based handover list, PresetIndex should be passed in the view action.

REQUEST

```
http://<Device IP>/stw-
```

```
cgi/eventrules.cgi?msubmenu=handover&action=view&PresetIndex=1
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

```
Channel.0.PresetIndex.1.ROIIndex.1.Enable=False
Channel.0.PresetIndex.1.ROIIndex.1.HandoverIndex.1.IPType=IPv4
Channel.0.PresetIndex.1.ROIIndex.1.HandoverIndex.1.IPAddress=1.1.1.1
Channel.0.PresetIndex.1.ROIIndex.1.HandoverIndex.1.Port=80
Channel.0.PresetIndex.1.ROIIndex.1.HandoverIndex.1.Username=admin
Channel.0.PresetIndex.1.ROIIndex.1.HandoverIndex.1.Password=4321
Channel.0.PresetIndex.1.ROIIndex.1.HandoverIndex.1.PresetNumber=1
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "Handover": [
    {
      "Channel": 0,
      "PresetList": [
        {
          "PresetIndex": 1,
          "HandoverList": [
            {
              "ROIIndex": 1,
              "Enable": false,
              "UserList": [
                {
                  "HandoverIndex": 1,
                  "IPType": "IPv4",
                  "IPAddress": "1.1.1.1",
                  "Port": 80,
                  "Username": "admin",
```



```

    "Password": "4321",
    "PresetNumber": 1
  }
]
}
]
}
]
}
]
}
]
}
}

```

4.6.6. Setting schedule configuration

Setting up a daily schedule **for report generation for people count**

REQUEST

```

http://<Device IP>/stw-
cgi/eventrules.cgi?submenu=scheduler&action=set&ScheduleType=Daily&Hour=10&
Minute=35&Type=PeopleCount

```

Setting up a weekly schedule **for report generation for people count**

REQUEST

```

http://<Device IP>/ stw-
cgi/eventrules.cgi?submenu=scheduler&action=set&ScheduleType=Weekly&Hour=10
&Minute=35&WeekDay=MON&Type=PeopleCount

```

Setting up a daily schedule **for report generation for heat map**

REQUEST

```

http://<Device IP>/stw-
cgi/eventrules.cgi?submenu=scheduler&action=set&ScheduleType=Daily&Hour=10&
Minute=35&Type=HeatMap

```

Setting up a weekly schedule **for report generation for heat map**

REQUEST

```

http://<Device IP>/ stw-
cgi/eventrules.cgi?submenu=scheduler&action=set&ScheduleType=Weekly&Hour=10

```

&Minute=35&WeekDay=MON&Type=HeatMap

4.7. Schedulelist

4.7.1. Description

The **schedulelist** submenu used to manage several schedulers.

Access level

Action	NVR
view	User
add	User
update	User
remove	User

4.7.2. Syntax

```
http://<Device IP>/stw-cgi/eventrules.cgi?msubmenu=  
schedulelist&action=<value>[&<parameter>=<value>]
```

4.7.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view	Schedule.#.ScheduleName	RES	<string>	Name of schedule
	Schedule.#.SUN	RES	<string>	Array of space-separated 1 and 0 for each hour of the day. <ul style="list-style-type: none">• 1: Enabled for that hour• 0: Disabled for that hour
	Schedule.#.MON	RES	<string>	Array of space-separated 1 and 0 for each hour of the day. <ul style="list-style-type: none">• 1: Enabled for that hour• 0: Disabled for that hour
	Schedule.#.TUE	RES	<string>	Array of space-separated 1 and 0 for each hour of the day. <ul style="list-style-type: none">• 1: Enabled for that hour• 0: Disabled for that hour

Action	Parameter	Request/ Response	Type/ Value	Description
	Schedule.#.WED	RES	<string>	Array of space-separated 1 and 0 for each hour of the day. <ul style="list-style-type: none"> • 1: Enabled for that hour • 0: Disabled for that hour
	Schedule.#.THU	RES	<string>	Array of space-separated 1 and 0 for each hour of the day. <ul style="list-style-type: none"> • 1: Enabled for that hour • 0: Disabled for that hour
	Schedule.#.FRI	RES	<string>	Array of space-separated 1 and 0 for each hour of the day. <ul style="list-style-type: none"> • 1: Enabled for that hour • 0: Disabled for that hour
	Schedule.#.SAT	RES	<string>	Array of space-separated 1 and 0 for each hour of the day. <ul style="list-style-type: none"> • 1: Enabled for that hour • 0: Disabled for that hour
	Schedule.#.HOL	RES	<string>	Array of space-separated 1 and 0 for each hour of the day. <ul style="list-style-type: none"> • 1: Enabled for that hour • 0: Disabled for that hour
	Schedule.#.IsFixed	RES	<bool> True, False	Array of space-separated 1 and 0 for each hour of the day. <div>CAMERA ONLY</div>
add	ScheduleName	REQ	<string>	Name of the schedule
	<ddd>	REQ	<bool> 0: Disable 1: Enable	Request parameter <ddd> can take any of the following parameters SUN,MON,TUE,WED,THU,FRI,SAT,HOL E.g. MON=1

Action	Parameter	Request/ Response	Type/ Value	Description
	<dddh>	REQ	<bool> 0: Disable 1: Enable	Request parameter <dddh> represents the hour of the day. <h> stands for the hours such as 0,1,2,3,4..10,11,12,...,23. E.g. SUN1=1 refers to SUNDAY 1 AM
	EveryDay	REQ	<bool> 0, 1	Whether to activate or deactivate the event operation every day <ul style="list-style-type: none"> • 0: Disabled • 1: Enabled 'EveryDay=1', denoting that the operation is activated every day. CAMERA ONLY
	EveryDay<h>	REQ	<bool> 0, 1	Daily time for event operation <ul style="list-style-type: none"> • 0: Disabled • 1: Enabled <h> stands for the hours such as 0,1,2,3,4..10,11,12,...,23. This parameter is valid only when EveryDay is set to 1; e.g. EveryDay=1 is required for EveryDay0 ... EveryDay23. 'EveryDay=1&EveryDay18=1' means the event operation is activated every day 6:00 PM to 6:59 PM. CAMERA ONLY

Action	Parameter	Request/Response	Type/Value	Description
	<dddh>.FromTo	REQ, RES	<string>	<p>The time of week selected for event operation The time is specified in the format of <mm-mm>. The first 'mm' must be smaller than or equal to the second 'mm'.</p> <p>This parameter is also valid only when <corresponding weekday><hour> is set to 1; e.g. SUN0=1 is required for SUN0.FromTo.</p> <p>'SUN=1&SUN18=1&SUN18.FromTo=12-20' means that the event operation is activated every Sunday from 6:12 PM to 6:20 PM.</p> <p>CAMERA ONLY</p>
	EveryDay<h>.FromTo	REQ, RES	<string>	<p>The time for everyday event action operation</p> <p>The time is specified in the format of <mm-mm>. The first 'mm' must be smaller than or equal to the second 'mm'.</p> <p>This parameter is valid only when EveryDay<hour> is set to 1; e.g. 'EveryDay0=1' is required for EveryDay0.FromTo.</p> <p>'EveryDay=1&EveryDay18=1&EveryDay 18.FromTo=12-20' means that the event operation is activated every day 6:12 PM to 6:20 PM.</p> <p>CAMERA ONLY</p>
update	ScheduleName	REQ	<string>	Schedule name
	ScheduleNewName	REQ	<string>	New schedule name if it needs to be changed
	<ddd>	REQ	<string> 0: Disable 1: Enable	<p>Request parameter <ddd> can take any of the following parameters</p> <p>SUN,MON,TUE,WED,THU,FRI,SAT,HOL</p> <p>E.g. MON=1</p>

Action	Parameter	Request/ Response	Type/ Value	Description
	<dddh>	REQ	<string> 0: Disable 1: Enable	Request parameter <dddh> represents the hour of that day. <h> stands for the hours such as 0,1,2,3,4..10,11,12,...,23. E.g. SUN1=1 refers to SUNDAY 1AM
	EveryDay	REQ	<bool> 0, 1	Whether to activate or deactivate the event operation every day <ul style="list-style-type: none"> • 0: Disabled • 1: Enabled <p>'EveryDay=1', denoting that the schedule is activated every day, is the same as when the ScheduleType parameter is set to Always.</p> <div>CAMERA ONLY</div>
	EveryDay<h>	REQ	<bool> 0, 1	Daily time for event operation <ul style="list-style-type: none"> • 0: Disabled • 1: Enabled <p><h> stands for the hours such as 0,1,2,3,4..10,11,12,...,23.</p> <p>This parameter is valid only when EveryDay is set to 1; e.g. EveryDay=1 is required for EveryDay0 ... EveryDay23.</p> <p>'EveryDay=1&EveryDay18=1' means the event operation is activated every day 6:00 PM to 6:59 PM.</p> <div>CAMERA ONLY</div>

Action	Parameter	Request/Response	Type/Value	Description
	<dddh>.FromTo	REQ, RES	<string>	<p>The time of week selected for event operation The time is specified in the format of <mm-mm>. The first 'mm' must be smaller than or equal to the second 'mm'.</p> <p>This parameter is also valid only when <corresponding weekday><hour> is set to 1; e.g. SUN0=1 is required for SUN0.FromTo.</p> <p>'SUN=1&SUN18=1&SUN18.FromTo=12-20' means that the event operation is activated every Sunday from 6:12 PM to 6:20 PM.</p> <p>CAMERA ONLY</p>
	EveryDay<h>.FromTo	REQ, RES	<string>	<p>The time for everyday event action operation</p> <p>The time is specified in the format of <mm-mm>. The first 'mm' must be smaller than or equal to the second 'mm'.</p> <p>This parameter is valid only when EveryDay<hour> is set to 1; e.g. 'EveryDay0=1' is required for EveryDay0.FromTo.</p> <p>'EveryDay=1&EveryDay18=1&EveryDay 18.FromTo=12-20' means that the event operation is activated every day 6:12 PM to 6:20 PM.</p> <p>CAMERA ONLY</p>
remove	ScheduleName	REQ	<string>	Name of schedule to be removed

4.7.4. Examples

4.7.5. Getting schedulelist

NOTE | The camera only supports JSON responses.

REQUEST

```
http://<Device IP>/stw-cgi/eventrules.cgi?submenu=schedulelist&action=view
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

```
Schedule.0.ScheduleName=Schedule1
Schedule.0.SUN=1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Schedule.0.MON=1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Schedule.0.TUE=1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Schedule.0.WED=1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Schedule.0.THU=1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Schedule.0.FRI=1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Schedule.0.SAT=1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Schedule.0.HOL=1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "Schedules": [{
    "ScheduleName": "Schedule1",
    "Schedule": {
      "SUN": ["1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1"],
      "MON": ["1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1"],
      "TUE": ["1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1"],
      "WED": ["1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1"],
      "THU": ["1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1"],
      "FRI": ["1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1"],
      "SAT": ["1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1"],
      "HOL": ["1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1"]
    }
  ]
}
```



```

        "FRI": ["1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1"],
        "SAT": ["1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1"],
        "HOL": ["1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1", "1"]
    }
}
}

```

4.7.6. Adding schedulelist

NOTE | The camera only supports JSON responses.

REQUEST

```

http://<Device IP>/stw-
cgi/eventrules.cgi?submenu=schedulelist&action=add&ScheduleName=schedule2&Mon=1&Mon12=1

```

TEXT RESPONSE

```

HTTP/1.0 200 OK
Content-type: text/plain
<Body>

```

OK

JSON RESPONSE

```

HTTP/1.0 200 OK
Content-type: application/json
<Body>

```

```

{
    "Response": "Success"
}

```

4.7.7. Updating schedulelist

NOTE

The camera only supports JSON responses.

REQUEST

```
http://<Device IP>/stw-  
cgi/eventrules.cgi?msubmenu=schedulelist&action=update&ScheduleName=schedule  
2&ScheduleNewName=schedule3&SUN=1
```

TEXT RESPONSE

```
HTTP/1.0 200 OK  
Content-type: text/plain  
<Body>
```

```
OK
```

JSON RESPONSE

```
HTTP/1.0 200 OK  
Content-type: application/json  
<Body>
```

```
{  
  "Response": "Success"  
}
```

4.7.8. Removing schedulelist

NOTE

The camera only supports JSON responses.

REQUEST

```
http://<Device IP>/stw-  
cgi/eventrules.cgi?msubmenu=schedulelist&action=remove&ScheduleName=schedule  
2
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
```

```
Content-type: text/plain
<Body>
```

OK

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "Response": "Success"
}
```

4.8. Audio Clip

4.8.1. Description

The **audiooutfiles** submenu manages audio clip files which are used as a sort of event notification.

NOTE | This chapter applies to network cameras only.

Access level

Action	Camera
view	Admin
set	Admin
install	Admin
control	Admin
remove	Admin

4.8.2. Syntax

```
http://<Device IP>/stw-cgi/eventrules.cgi?msubmenu=
audiooutfiles&action=<value>[&<parameter>=<value>]
```

4.8.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view	TotalSpace	RES	<string>	Total space of unit as KB
	FreeSpace	RES	<string>	Free space of unit as KB
set	Index	REQ, RES	<int>	Index of audio clip
	Gain	REQ, RES	<int>	Audio output gain The value is in the range of 1 to 5.
	Name	REQ, RES	<string>	File name of audio clip
install	Index	REQ, RES	<int>	Index of audio clip
	Name	REQ, RES	<string>	File name of audio clip
	Type	REQ, RES	<enum> WAV	File type of audio clip
	Gain	REQ, RES	<int>	Audio output gain The value is in the range of 1 to 5.
control	Type	REQ	<enum> Download, Play, Stop	Control type <ul style="list-style-type: none"> • Download: Downloads the audio clip to the client • Play: Plays the audio clip • Stop: Stops playing of the audio clip <div> Note Download not supported in AMS </div>
	Index	REQ	<int>	Index of audio clip CAMERA ONLY
	Name	REQ	<string>	Unique name of the audio file AMS ONLY
	SpeakerID	REQ	<int>	Speaker ID where the audio should be played AMS ONLY
	GroupID	REQ	<int>	Speaker Group ID where the audio should be played AMS ONLY
remove	Index	REQ, RES	<int>	Index of audio clip

4.8.4. Examples

4.8.5. Getting basic information

REQUEST

```
http://<Device IP>/stw-cgi/eventrules.cgi?submenu=audiooutfiles&action=view
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "AudioOutFiles": {
    "FreeSpace": 3070,
    "TotalSpace": 3072,
    "AudioClips": []
  }
}
```

4.8.6. Installs an audio clip to the device

REQUEST

```
http://<Device IP>/stw-
cgi/eventrules.cgi?submenu=audiooutfiles&action=install&Index=1&Name=testau
dio&Type=WAV&Gain=3
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "Response": "Success"
}
```

4.8.7. Downloads an audio clip to the client

REQUEST

```
http://<Device IP>/stw-  
cgi/eventrules.cgi?submenu=audiooutfiles&action=control&Type=Download&Index  
=1
```

JSON RESPONSE

```
HTTP/1.0 200 OK  
Content-type: application/json  
<Body>
```

```
{  
  "Response": "Success"  
}
```

4.8.8. Play Audio file in a Group of speaker

REQUEST

```
http://<Device IP>/stw-  
cgi/eventrules.cgi?submenu=audiooutfiles&action=control&Type=Play&Name=Src1  
_EmergencyExit.WAV&GroupID=1
```

RESPONSE

```
{  
  "Response": "Success"  
}
```

4.8.8.1. Error Responses

In case if the file is not available,

RESPONSE

```
{  
  "Response": "Fail",  
  "Error": {  
    "Code": 604,  
    "Details": "Invalid Value",  
    "Reason": "File Name Not Found"  
  }  
}
```

```
}  
}
```

In case if the Group ID is not available,

RESPONSE

```
{  
  "Response": "Fail",  
  "Error": {  
    "Code": 604,  
    "Details": "Invalid Value",  
    "Reason" : "GroupID Not Found"  
  }  
}
```

In case if the SpeakerID is not available,

RESPONSE

```
{  
  "Response": "Fail",  
  "Error": {  
    "Code": 604,  
    "Details": "Invalid Value",  
    "Reason" : "SpeakerID Not Found"  
  }  
}
```

4.9. TTS (Text to speech) Files

4.9.1. Description

The **ttsfiles** submenu manages tts files in the device.

NOTE | This chapter applies to only AMS.

Access level

Action	AMS
view	User
control	Admin

4.9.2. Syntax

```
http://<Device IP>/stw-cgi/eventrules.cgi?msubmenu=ttsfiles&action=<value> [&<parameter>=<value>]
```

4.9.3. Parameters

Action	Parameter	Request/Response	Type/Value	Description
view	TTSTList.#.Index	RES	<int>	Index of the tts file
	TTSTList.#.Name	RES	<string>	File name of the tts file
control	Type	REQ	<enum> Play, Stop	Control type <ul style="list-style-type: none">• Play: Plays the tts file• Stop: Stops playing of the tts file
	Name	REQ	<string>	Unique name of the tts file
	SpeakerID	REQ	<int>	Speaker ID where the audio should be played
	GroupID	REQ	<int>	Speaker Group ID where the audio should be played

4.9.4. Examples

4.9.5. Getting list of tts files

REQUEST

```
http://<Device IP>/stw-cgi/eventrules.cgi?msubmenu=ttsfiles&action=view
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "TTSFiles": {
    "TTSTList": [
      {
        "Index": 1,
        "Name": "Src1_EmergencyExit.txt"
      }
    ]
  }
}
```



```

        },
        {
            "Index": 2,
            "Name": "Src1_MotionWaring.txt"
        }
    ]
}

```

4.9.6. Play Text file in a Group of speaker

REQUEST

```

http://<Device IP>/stw-
cgi/eventrules.cgi?submenu=ttsfiles&action=control&Type=Play&Name=Src1_Emer
gencyExit.txt&GroupID=1

```

RESPONSE

```

{
    "Response": "Success"
}

```

4.9.6.1. Error Responses

In case if the file is not a available,

RESPONSE

```

{
    "Response": "Fail",
    "Error": {
        "Code": 604,
        "Details": "Invalid Value",
        "Reason" : "File Name Not Found"
    }
}

```

In case if the Group ID is not available,

RESPONSE

```

{

```

```

"Response": "Fail",
"Error": {
  "Code": 604,
  "Details": "Invalid Value",
  "Reason" : "GroupID Not Found"
}
}

```

In case if the SpeakerID is not available,

RESPONSE

```

{
  "Response": "Fail",
  "Error": {
    "Code": 604,
    "Details": "Invalid Value",
    "Reason" : "SpeakerID Not Found"
  }
}

```

4.10. LED Preset

4.10.1. Description

The **ledpreset** submenu manages to make presets for LED controlling.

Access level

Action	Camera	LEDBox
view	Admin	Admin
update	Admin	Admin
control	Admin	Admin

4.10.2. Syntax

```

http://<Device IP>/stw-
cgi/eventrules.cgi?submenu=ledpreset&action=<value> [&<parameter>=<value>]

```

4.10.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view	LEDPresetIndex	REQ, RES	<int>	Index of LED preset
update	LEDPresetIndex	REQ, RES	<int>	Index of LED preset
	LEDUsageIndex	RES	<csv> 1,2	It means LED hardware index. Specified index LED will be affected by led preset configuration.
	LightMode	REQ, RES	<enum> On, Off	<ul style="list-style-type: none"> • On : Turn on the LEDUsageIndex LED • Off : Turn off the LEDUsageIndex LED
	Color	REQ, RES	<enum> Green, Blue, Red, Pink, SkyBlue, Purple	Color to apply
	Name	RES	<string>	Name of this LED preset
control	LEDPresetIndex	REQ	<int>	Index of LED preset

4.10.4. Examples

4.10.5. Getting list of led preset

REQUEST

```
http://<Device IP>/stw-cgi/eventrules.cgi?submenu=ledpreset&action=view
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "LEDPresetList": [
    {
      "LEDPresetIndex": 1,
      "LEDUsageIndex": [
        1
      ],
    },
  ],
}
```

```

        "LightMode": "On",
        "Color": "Green",
        "Name": "Vacant"
    },
    {
        "LEDPresetIndex": 2,
        "LEDUsageIndex": [
            1
        ],
        "LightMode": "On",
        "Color": "Red",
        "Name": "Occupied"
    },
    {
        "LEDPresetIndex": 3,
        "LEDUsageIndex": [
            2
        ],
        "LightMode": "On",
        "Color": "Green",
        "Name": "Vacant"
    },
    {
        "LEDPresetIndex": 4,
        "LEDUsageIndex": [
            2
        ],
        "LightMode": "On",
        "Color": "Red",
        "Name": "Occupied"
    },
    {
        "LEDPresetIndex": 5,
        "LEDUsageIndex": [
            1,
            2
        ],
        "LightMode": "On",
        "Color": "Green",
        "Name": "Vacant"
    },

```

```

    {
      "LEDPresetIndex": 6,
      "LEDUsageIndex": [
        1,
        2
      ],
      "LightMode": "On",
      "Color": "Red",
      "Name": "Occupied"
    }
  ]
}

```

4.10.6. Change ledpreset 1's color to blue

REQUEST

```

http://<Device IP>/stw-
cgi/eventrules.cgi?submenu=ledpreset&action=update&LEDPresetIndex=1&LightMo
de=On&Color=Blue

```

RESPONSE

```

{
  "Response": "Success"
}

```

4.10.7. Change ledpreset 2's LightMode to Off

REQUEST

```

http://<Device IP>/stw-
cgi/eventrules.cgi?submenu=ledpreset&action=update&LEDPresetIndex=2&LightMo
de=Off

```

RESPONSE

```

{
  "Response": "Success"
}

```

4.10.8. Apply LEDPresetIndex 1 which will affect to LED hardware index 1 because LEDUsageIndex setting is 1.

REQUEST

```
http://<Device IP>/stw-  
cgi/eventrules.cgi?msubmenu=ledpreset&action=control&LEDPresetIndex=1
```

RESPONSE

```
{  
  "Response": "Success"  
}
```

4.10.9. Apply LEDPresetIndex 2 which will turn off LED hardware 1 because LightMode is Off and LEDUsageIndex is 1.

REQUEST

```
http://<Device IP>/stw-  
cgi/eventrules.cgi?msubmenu=ledpreset&action=control&LEDPresetIndex=2
```

RESPONSE

```
{  
  "Response": "Success"  
}
```

4.11. Audio Clip Schedule

4.11.1. Description

The **audioclipschedule** submenu configures the schedule settings for audio clip playback.

NOTE | This chapter applies to network cameras only.

Access level

Action	Camera
view	Admin
set	Admin

4.11.2. Syntax

```
http://<Device IP>/stw-cgi/eventrules.cgi?submenu=
audiooutfliesschedule&action=<value>[&<parameter>=<value>]
```

4.11.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view	Channel	REQ, RES	<int>	Channel ID
set	Channel	REQ, RES	<int>	Channel ID
	Enable	REQ, RES	<bool> True, False	Enables or disables playback activation <ul style="list-style-type: none">• True: Activated• False: Deactivated
	AudioClpeIndex	REQ, RES	<int>	Index of audio clip
	Hour	REQ, RES	<int>	Hour of the day
	Minute	REQ, RES	<int>	Minute at which report will be generated
	WeekDay	REQ, RES	<enum> SUN, MON, TUE, WED, THU, FRI, SAT	Day of the week <div>Note This parameter is valid only when ScheduleType is set to Weekly.</div>
	ScheduleType	REQ, RES	<enum> Daily, Weekly	Time schedule to play audio clip <ul style="list-style-type: none">• Daily: At scheduled time every day• Weekly: At scheduled day and time

4.11.4. Examples

4.11.5. Getting scheduler settings of audio clip playback

REQUEST

```
http://<Device IP>/stw-
cgi/eventrules.cgi?submenu=audiooutfliesschedule&action=view
```

JSON RESPONSE

```
HTTP/1.0 200 OK
```

Content-type: application/json

<Body>

```
{
  "AudioOutFilesSchedule": [
    {
      "Channel": 0,
      "AudioClip": [
        {
          "AudioClipIndex": 1,
          "Enable": true,
          "ScheduleType": "Daily",
          "Hour": 0,
          "Minute": 0,
          "WeekDay": "SUN"
        }
      ]
    }
  ]
}
```

4.11.6. Setting scheduler settings of audio clip playback

REQUEST

```
http://<Device IP>/stw-
cgi/eventrules.cgi?submenu=audiooutfilesschedule&action=set&AudioClipIndex=
1&Enable=True&ScheduleType=Weekly&Hour=10&Minute=15&WeekDay=MON
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "Response": "Success"
}
```


4.12. Internal Handover Calibration

4.12.1. Description

The **internalhandovercalibration** submenu manages the internal handover calibration settings which are used for the smart zoom feature.

NOTE

This chapter is applicable for multi-directional cameras that have a PTZ channel.

Access level

Action	Camera
view	Admin
set	Admin
control	Admin
check	Admin
remove	Admin

4.12.2. Syntax

```
http://<Device IP>/stw-  
cgi/eventrules.cgi?submenu=internalhandovercalibration&action=<value>[&<par  
ameter>=<value>]
```

4.12.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view	Channel	REQ	<int>	Channel ID
set	Channel	REQ, RES	<int>	Channel ID
	PTZChannel.#.Mapping.# .LocalScreenCoordinate	REQ, RES	<string>	Target Channel's coordinates that PTZ Channel would head for. (X, Y)
	PTZChannel.#.Mapping.# .PTCoordinate	REQ, RES	<string>	Absolute coordinates of Pan and Tilt of PTZ channels to calibrate with target channel. (P, T)
control	Channel	REQ	<int>	Channel ID
	PTZChannel	REQ	<int>	PTZ Channel ID
	PreviewLocalScreenCoor dinate	REQ	<string>	Target Channel's coordinates that PTZ Channel would head for. (X, Y)
check	Channel	REQ	<int>	Channel ID

Action	Parameter	Request/ Response	Type/ Value	Description
	CalibrationCompleted	RES	<bool> True, False	Shows whether each channel's calibration settings are complete or not
remove	Channel	RES	<int>	Channel ID
	PTZChannels	RES	<csv> #, All	PTZ Channel ID

4.12.4. Examples

4.12.5. Getting internal handover calibration settings for all channels

REQUEST

```
http://<Device IP>/stw-  
cgi/eventrules.cgi?submenu=internalhandovercalibration&action=view
```

TEXT RESPONSE

```
HTTP/1.0 200 OK  
Content-type: text/plain  
<Body>
```

```
Channel.0.PTZChannel.4.Mapping.1.LocalScreenCoordinate=555,300  
Channel.0.PTZChannel.4.Mapping.1.PTCoordinate=0.00,25.00  
Channel.0.PTZChannel.4.Mapping.2.LocalScreenCoordinate=570,803  
Channel.0.PTZChannel.4.Mapping.2.PTCoordinate=0.70,48.61  
Channel.0.PTZChannel.4.Mapping.3.LocalScreenCoordinate=1367,764  
Channel.0.PTZChannel.4.Mapping.3.PTCoordinate=38.87,46.77  
Channel.0.PTZChannel.4.Mapping.4.LocalScreenCoordinate=1298,294  
Channel.0.PTZChannel.4.Mapping.4.PTCoordinate=35.55,24.69
```

JSON RESPONSE

```
HTTP/1.0 200 OK  
Content-type: application/json  
<Body>
```

```
{  
  "InternalHandoverCalibrations": [  
    ...  
  ]  
}
```

```

{
  "Channel": 0,
  "PTZChannels": [
    {
      "PTZChannel": 4,
      "Mappings": [
        {
          "Index": 1,
          "LocalScreenCoordinate": "555,300",
          "PTCoordinate": "0.00,25.00"
        },
        {
          "Index": 2,
          "LocalScreenCoordinate": "570,803",
          "PTCoordinate": "0.70,48.61"
        },
        {
          "Index": 3,
          "LocalScreenCoordinate": "1367,764",
          "PTCoordinate": "38.87,46.77"
        },
        {
          "Index": 4,
          "LocalScreenCoordinate": "1298,294",
          "PTCoordinate": "35.55,24.69"
        }
      ]
    }
  ]
}

```

4.12.6. Setting calibration coordinates to a specific channel

REQUEST

```

http://<Device IP>/stw-
cgi/eventrules.cgi?submenu=internalhandovercalibration&action=set&Channel=1
&PTZChannel=4&Mapping.1.LocalScreenCoordinate=306,162&Mapping.1.PTCoordinate
=35.55999755859375,24.69999885559082

```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

OK

4.12.7. Controls PTZ channel to move requested local coordinates of a specific channel

REQUEST

```
http://<Device IP>/stw-
cgi/eventrules.cgi?submenu=internalhandovercalibration&action=control&Chann
el=1&PTZChannel=4&PreviewLocalScreenCoordinate=300,740
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

OK

4.13. IO Box registration

4.13.1. Description

The **ioboxregister** submenu provides how to register an io box.

NOTE

This chapter is only applicable to Camera

Access level

Action	Camera
view	Admin
add/update	Admin
remove	Admin
check	Admin

4.13.2. Syntax

```
http://<Device IP>/stw-cgi/eventrules.cgi?msubmenu=  
ioiboxregister&action=<value> [&<parameter>=<value>]
```

4.13.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view	Channel	REQ	<int>	Channel ID
	IsRebootRequired	RES	<bool>	<ul style="list-style-type: none">• True : When you change Audio source selection or IO source selection, device will reboot.• False : not reboot.
add/update	Channel	REQ, RES	<int>	Channel ID
	Enable	REQ, RES	<bool> True, False	Enables or disable IO box
	IOBoxIndex	REQ, RES	<int>	
	IPType	REQ, RES	<enum> IPV4, IPV6	
	IPAddress	REQ, RES	<string>	IP address of IO box
	Port	REQ, RES	<int>	Port number of IO box
	Username	REQ, RES	<string>	
	Password	REQ	<string>	
	IsPasswordEncrypted	REQ	<bool> True, False	
	ConnectionMode	REQ, RES	<enum> HTTP, HTTPS	
	AudioSourceSelection	REQ, RES	<enum> Internal, External	Select audiosource whether it is internal audiosource or external audiosource(ex.IOBox)
	IOSourceSelection	REQ, RES	<enum> Internal, External	Select IO source whether it is internal IO source or external IO source(ex.IOBox)
remove	Channel	REQ	<int>	Channel ID
	IPBoxIndex	REQ	<int>	
check	ConnectionStatus	REQ	<int>	Current status of IO box

Action	Parameter	Request/Response	Type/Value	Description
	ModelName	RES	<string>	Shows connected iobox's model name

4.13.4. Examples

4.13.5. Getting the current status of io box

REQUEST

```
http://<Device IP>/stw-cgi/eventrules.cgi?msubmenu=ioboxregister&action=view
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "ioboxregister": [
    {
      "Channel": 0,
      "IOBoxList": [
        {
          "IOBoxIndex": 1,
          "Enable": false,
          "IPType": "IPv4",
          "IPAddress": "192.168.1.100",
          "Port": 80,
          "ConnectionMode": "HTTP",
          "Username": "admin",
          "Password": ""
        }
      ]
    }
  ]
}
```

4.13.6. Adding a new iobox information

REQUEST

```
http://<Device IP>/stw-  
cgi/eventrules.cgi?msubmenu=ioboxregister&action=add&Channel=0&IPAddress=192  
.168.1.100&IPType=IPv4&Port=80&ConnectionMode=HTTP&Username=admin&IsPassword  
Encrypted=True
```

TEXT RESPONSE

```
HTTP/1.0 200 OK  
Content-type: text/plain  
<Body>
```

```
OK
```

4.13.7. Connecting Io box with a camera

REQUEST

```
http://<Device IP>/stw-  
cgi/eventrules.cgi?msubmenu=ioboxregister&action=update&Channel=0&IOBoxIndex  
=1&Enable=True
```

TEXT RESPONSE

```
HTTP/1.0 200 OK  
Content-type: text/plain  
<Body>
```

```
OK
```

4.13.8. Removing registered io box information

REQUEST

```
http://<Device IP>/stw-  
cgi/eventrules.cgi?msubmenu=ioboxregister&action=remove&Channel=0&IOBoxIndex  
=1
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: text/plain
<Body>
```

```
OK
```

4.13.9. Checking connection status of io box

REQUEST

```
http://<Device IP>/stw-
cgi/eventrules.cgi?msubmenu=ioboxregister&action=check&Channel=0
```

TEXT RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "ioboxregister": [
    {
      "Channel": 0,
      "ConnectionStatus": "Connected"
    }
  ]
}
```

4.14. indicationpass

4.14.1. Description

The **indicationpass** submenu allows the user to pass event information to a predefined camera when a parking detection event occurs. A fisheye lens is not good for watching a parking area just below the camera, so the user can set it to observe the opposite side of parking lot to detect parked vehicles and send analyzed data to the opposite camera. This feature will work only when the user sets the LEDUsage value in ledindicator submenu to 1.

Access level

Action	Camera	Encoder
view	Admin	Admin
add/update	Admin	Admin
remove	Admin	Admin

4.14.2. Syntax

```
http://<Device IP>/stw-cgi/eventrules.cgi?msubmenu=
indicationpass&action=view&[&<parameter>=<value>...]
```

4.14.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads indication pass settings
	Channel	REQ, RES	<int>	Channel ID
add/update	Channel	REQ, RES	<int>	Channel ID
	IndicationPassIndex	REQ, RES	<int>	Index of receiver camera
	IPType	REQ, RES	<enum> IPV4, IPV6	IP Type of receiver camera
	IPAddress	REQ, RES	<string> <formatInfo="IPv4Address or IPv6Addresses">	IP Address of receiver camera
	Port	REQ, RES	<int>	Port of receiver camera
	Username	REQ, RES	<string>	User name of receiver camera
	Password	REQ, RES	<string>	Password of receiver camera
	IsPasswordEncrypted	REQ	<bool> True, False	Enables or disables password encryption for receiver camera
	ConnectionMode	REQ, RES	<enum> HTTP, HTTPS	Connection mode to connect receiver camera
remove	Channel	REQ	<int>	Channel ID
	IndicationPassIndex	REQ	<csv>	Index of receiver camera to be deleted

4.14.4. Examples

4.14.5. Getting the indication pass settings

REQUEST

```
http://<Device IP>/eventrules.cgi?msubmenu=indicationpass&action=view
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: json/application
<Body>
```

```
{
  "IndicationPass": [
    {
      "Channel": 0,
      "UserList": [
        {
          "IndicationPassIndex": 1,
          "IPType": "IPv4",
          "IPAddress": "192.168.1.1",
          "Port": 80,
          "ConnectionMode": "HTTP",
          "Username": "admin",
          "Password": ""
        }
      ]
    }
  ]
}
```

4.14.6. Adding information of receiver camera

REQUEST

```
http://<Device IP>/stw-
cgi/eventrules.cgi?msubmenu=indicationpass&action=add&IPType=IPv4&Connection
Mode=HTTP&IPAddress=192.168.1.1&Port=80&Username=admin&IsPasswordEncrypted=T
rue
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "Response": "Success"
}
```

4.14.7. Removing receiver camera(s)

IndicationPassIndex is used to remove the Receiver Camera at specified index.

REQUEST

```
http://<Device IP>/stw-
cgi/eventrules.cgi?submenu=handover2&action=remove&IndicationPassIndex=1
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{
  "Response": "Success"
}
```

Chapter 5. Event Status

5.1. Event Status

5.1.1. Description

eventstatus.cgi is used to request the current event status (activated or deactivated).

eventstatus.cgi has three submenus — check, monitor and monitordiff: The **check** submenu requests the current status once; The **monitor** submenu requests the current status on a certain time interval, irrespective of whether the state changed or not (and also requests the event status if an event occurs); and The **monitordiff** submenu initially requests the status of all events and later makes requests whenever any change from previous state occurs.

Access level

Action	Camera	Encoder	NVR
check	Guest	Guest	User
monitor	Guest	Guest	User
monitordiff	Guest	Guest	User

5.1.2. Syntax

```
http://<Device IP>/stw-cgi/eventstatus.cgi?msubmenu=  
eventstatus&action=<value> [&<parameter>=<value>]
```

5.1.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
check	Channel.#.EventType	REQ, RES	<csv> See Supported Events List table.	<p>Event type</p> <p>If the status of VideoAnalytics is requested, the following values are returned in response:</p> <ul style="list-style-type: none"> • VideoAnalytics.Passing • VideoAnalyticsEntering • VideoAnalyticsExiting • VideoAnalyticsAppearing • VideoAnalyticsDisappearing <p>Note OpenSDK" Type's meta event response. (supports only "event" type) "check" action doesn't support "</p>
	AlarmInput	REQ, RES	<csv>	Alarm input number
	AlarmOutput	REQ, RES	<csv>	Alarm output number
	Aux	REQ, RES	<csv>	Auxiliary devices
	SystemEvent	REQ, RES	<csv> see Supported Events List table.	System event
	IncludeTimestamp	REQ	<bool> True, False	Whether a time stamp is included or not
	Timestamp	RES	<string>	Time stamp
	POS.#.EventType	REQ, RES	<csv> KeywordMa tch	POS event type
	SchemaBased	REQ	<bool> True, False	Shows schema based response. To know schema, refer to the eventstatusschema submenu.
	MQTTSubscription	REQ, RES	<csv>	MQTTSubscription index number

Action	Parameter	Request/ Response	Type/ Value	Description
monitor	Channel.#.EventType	REQ, RES	<csv> see Supported Events List table.	Event type If the status of VideoAnalytics is requested, the following values are returned in response: <ul style="list-style-type: none"> • VideoAnalytics.Passing • VideoAnalyticsEntering • VideoAnalyticsExiting • VideoAnalyticsAppearing • VideoAnalyticsDisappering
	AlarmInput	REQ, RES	<csv>	Alarm input number
	AlarmOutput	REQ, RES	<csv>	Alarm output number
	Aux	REQ, RES	<csv>	Auxiliary device
	SystemEvent	REQ, RES	<csv> see Supported Events List table.	System event
	Periodicity	REQ	<int>	Interval in seconds
	ChangedConfigURI	RES	<string>	Configuration change in camera The value is returned in the format of <CGI file name>?<submenu name>. e.g. if the motion detection related setting is changed with eventsources.cgi, the returned data will be ChangedConfigURI=eventsources.cgi? msubmenu=videoanalysis.
	IncludeTimestamp	REQ	<bool> True, False	Whether a time stamp is included or not
	Timestamp	RES	<string>	Time stamp
	POS.#.EventType	REQ, RES	<csv> KeywordMa tch	POS Event Type
	EventDescription	RES	<string>	Event Description

Action	Parameter	Request/ Response	Type/ Value	Description
	SchemaBased	REQ	<bool> True, False	Shows schema based response. To know schema, refer to the eventstatusschema submenu.
	AttributeUpdate	RES	<bool> True, False	Checks whether the property has been changed
	MQTTSubscription	REQ, RES	<csv>	MQTTSubscription index number
monitordiff	Channel.#.EventType	REQ, RES	<csv> see Supported Events List table.	Event type If the status of VideoAnalytics is requested, the following values are returned in response: <ul style="list-style-type: none"> • VideoAnalytics.Passing • VideoAnalyticsEntering • VideoAnalyticsExiting • VideoAnalyticsAppearing • VideoAnalyticsDisappearing
	AlarmInput	REQ, RES	<csv>	Alarm input number Values may vary depending on the supported alarm input. Please check the device attributes using attributes.cgi.
	AlarmOutput	REQ, RES	<csv>	Alarm output number
	Aux	REQ, RES	<csv>	Auxiliary device
	SystemEvent	REQ, RES	<csv> see Supported Events List table.	System event
	ChangedConfigURI	RES	<string>	Configuration change in camera
	IncludeTimestamp	REQ	<bool> True, False	Whether a time stamp is included or not
	Timestamp	RES	<string>	Time stamp
	POS.#.EventType	REQ, RES	<csv> KeywordMa tch	POS event type
	EventDescription	RES	<string>	Event description

Action	Parameter	Request/ Response	Type/ Value	Description
	SchemaBased	REQ	<bool> True, False	Shows schema based response. To know schema, refer to the eventstatusschema submenu.
	EventFilter	REQ, RES	<enum> SystemEvent, POSEvent, ChannelEvent, None	Filters by type to search an event
	AttributeUpdate	RES	<bool> True, False	Checks whether the property has been changed
	MQTTSubscription	REQ, RES	<csv>	MQTTSubscription index number

Supported Events List

EventType	Event List
SystemEvent	PowerOn, PowerOff, PowerReboot, ConfigChange, Backup, FWUpdate, FactoryReset, HDDFull, HDDFail, HDDNone, FanError, SDFormat, SDFail, SDFull, SDInsert, SDRemove, Network, TimeChange, Record, ConfigurationBackup, ConfigurationRestore, NASFormat, NASFail, NASFull, NASConnect, NASDisconnect, CPUFanError, FrameFanError, LeftFanError, RightFanError, Recording, TimeChange, Network, InternalHDDerase, AdminLogin, RecordFiltering, NetCamTrafficOverflow, RecordingError, OverwriteDecoding, EndofFrame, RAIDEnable, RAIDSetup, RAIDBuilding, RAIDBuildCancel, RAIDBuildFail, RAIDDegrade, RAIDRebuildStart, RAIDFail, RAIDRebuildFail, iSCSIDisconnect, BeingUpdate, InternalHDDConnect, BatteryFail, RecordFrameDrop, DualSMPSFail, USBHDDConnect, DSPDisplayStart, DSPVASystemStart, AMDLoadFail, RAIDDeviceAdd, RAIDRecordRestriction, AlarmReset, NewFWAvailable, PasswordChange, ConfigRestore, EmergencyTrigger, InternalHDDWarmup, GSensorEvent, GPSDisconnect, WiFiSignalChanged, OverSpeed, VPUError, MemoryError, CpuOverload, NetTxTrafficOverflow
Channel#.EventType	MotionDetection, FaceDetection, Videoloss, Tampering, AudioDetection, VideoAnalytics, NetworkAlarmInput, Tracking, RecordingStatus, PriorityRecordingStatus, PTZMotion, UserInput, NetworkCameraConnect, NetworkAlarmInput, AMDStart, LowFps, DefocusDetection, Profile#.DigitalAutoTracking, FogDetection, SDFormat, SDFail, SDFull, SDInsert, AudioAnalytics, USBWIFIConnect, QueueEvent, ShockDetection, TemperatureChangeDetection, BoxTemperatureDetection, ObjectDetection, OpenSDK, BodyTemperatureDetection, MaskDetection, SocialDistancingViolation, CallRequest, TamperingSwitch, DTMFReceived, ProximitySensor, ParkingDetection, ParkingVehicleCountChanged

5.1.4. Examples

5.1.5. Checking status

Checking the current status of all event and alarm inputs/outputs

The **check** submenu requests the current status once.

The status is represented with the value True (for activated) or False (for deactivated).

REQUEST

```
http://<Device IP>/stw-cgi/eventstatus.cgi?msubmenu=eventstatus&action=check
```

TEXT RESPONSE

```
HTTP/1.0 200 OK  
Content-type: text/plain  
<Body>
```

```
POS.0.KeywordMatch=False  
Channel.0.VideoLoss=True  
Channel.0.Connected=True  
Channel.0.AudioDetection=False  
Channel.0.NetworkCameraConnect=False  
Channel.0.NetworkAlarmInput=False  
Channel.0.MotionDetection=False  
Channel.0.MotionDetection.RegionID.1=False  
Channel.0.MotionDetection.RegionID.1.Level=0  
Channel.0.FaceDetection=False  
Channel.0.DefocusDetection=False  
Channel.0.VideoAnalytics.Passing=False  
Channel.0.VideoAnalytics Entering=False  
Channel.0.VideoAnalytics.Exiting=False  
Channel.0.VideoAnalytics.Appearing=False  
Channel.0.VideoAnalytics.Disappearing=False  
Channel.0.ShockDetection=False  
Channel.0.TemperatureChangeDetection.RegionID.1=False  
Channel.0.CallRequest=False  
Channel.0.TamperingSwitch=False  
Channel.0.DTMFReceived=False  
Channel.0.ProximitySensor=False  
Channel.0.ObjectDetection=False  
Channel.0.ObjectDetection.Person=False  
Channel.0.ObjectDetection.Vehicle=False
```

Channel.0.ObjectDetection.Face=False
Channel.0.ObjectDetection.LicensePlate=False
Channel.0.ObjectDetection.Detail.Vehicle.Types.Bicycle=False
Channel.0.ObjectDetection.Detail.Vehicle.Types.Car=False
Channel.0.ObjectDetection.Detail.Vehicle.Types.Motorcycle=False
Channel.0.ObjectDetection.Detail.Vehicle.Types.Bus=False
Channel.0.ObjectDetection.Detail.Vehicle.Types.Truck=False
Channel.0.SocialDistancingViolation=False
Channel.0.AMDStart=False
Channel.0.LowFps=False
Channel.0.Tampering=False
Channel.0.SDFail=False
Channel.0.SDFull=False
Channel.0.Tracking=False
AlarmInput.1=False
AlarmOutput.1=False
AudioOutput.1=False
SystemEvent.CPUFanError=False
SystemEvent.LeftFanError=False
SystemEvent.RightFanError=False
SystemEvent.PowerOn=True
SystemEvent.PowerReboot=False
SystemEvent.ConfigChange=False
SystemEvent.Backup=False
SystemEvent.FWUpdate=False
SystemEvent.FactoryReset=False
SystemEvent.HDDFull=False
SystemEvent.HDDFail=False
SystemEvent.HDDNone=False
SystemEvent.Recording=True
SystemEvent.TimeChange=False
SystemEvent.Network.1=True
SystemEvent.Network.2=True
SystemEvent.Network.3=False
SystemEvent.Network.4=False
SystemEvent.InternalHDDerase=False
SystemEvent.AdminLogin=True
SystemEvent.RecordFiltering=False
SystemEvent.NetCamTrafficOverflow=False
SystemEvent.RecordingError=False
SystemEvent.OverwriteDecoding=False

```
SystemEvent.EndofFrame=False
SystemEvent.RAIDEnable.1=False
SystemEvent.RAIDSetup.1=False
SystemEvent.RAIDBuilding.1=False
SystemEvent.RAIDBuildCancel.1=False
SystemEvent.RAIDBuildFail.1=False
SystemEvent.RAIDDegrade.1=False
SystemEvent.RAIDRebuildStart.1=False
SystemEvent.RAIDFail.1=False
SystemEvent.RAIDRebuildFail.1=False
SystemEvent.RAIDEnable.2=False
SystemEvent.RAIDSetup.2=False
SystemEvent.RAIDBuilding.2=False
SystemEvent.RAIDBuildCancel.2=False
SystemEvent.RAIDBuildFail.2=False
SystemEvent.RAIDDegrade.2=False
SystemEvent.RAIDRebuildStart.2=False
SystemEvent.RAIDFail.2=False
SystemEvent.RAIDRebuildFail.2=False
SystemEvent.RAIDDeviceAdd=False
SystemEvent.RAIDRecordRestriction=False
SystemEvent.iSCSIDisconnect=False
SystemEvent.BeingUpdate=False
SystemEvent.InternalHDDConnect.1=False
SystemEvent.BatteryFail=False
SystemEvent.RecordFrameDrop=False
SystemEvent.DualSMPSFail=True
SystemEvent.USBHDDConnect=False
SystemEvent.DSPDisplayStart=True
SystemEvent.DSPVASystemStart=False
SystemEvent.AMDLoadFail=False
SystemEvent.AlarmReset=False
SystemEvent.NewFWAvailable=False
SystemEvent.PasswordChange=False
SystemEvent.ConfigRestore=False
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```

{
  "POSEvent": [
    {
      "POS": 0,
      "KeywordMatch": false
    }
  ],
  "ChannelEvent": [
    {
      "Channel": 0,
      "Videoloss": true,
      "AudioDetection": false,
      "NetworkCameraConnect": false,
      "NetworkAlarmInput": false,
      "MotionDetection": false,
      "MotionDetectionRegions": {
        "1": false
      },
      "MotionDetectionRegionsLevel": {
        "1": 0
      },
      "FaceDetection": false,
      "DefocusDetection": false,
      "ShockDetection": false,
      "CallRequest": false,
      "TamperingSwitch": false,
      "DTMFReceived": false,
      "ProximitySensor": false,
      "VideoAnalytics": {
        "Passing": false,
        "Entering": false,
        "Exiting": false,
        "Appearing": false,
        "Disappearing": false
      },
      "AMDStart": false,
      "LowFps": false,
      "Tampering": false,
      "SDFail": false,
      "SDFull": false,
      "Tracking": false,
    }
  ]
}

```

```

    "TemperatureChangeDetection": false,
    "TemperatureChangeDetectionRegions": {
      "1": false
    },
    "SocialDistancingViolation": {
      "SocialDistancingViolation": false,
      "ObjectIDs": []
    },
    "ObjectDetection": {
      "ObjectDetection": false,
      "ObjectTypes": {
        "Person": false,
        "Vehicle": false,
        "Face": false,
        "LicensePlate": false
      },
      "ObjectTypeDetails": {
        "Vehicle.Types.Bicycle": false,
        "Vehicle.Types.Car": false,
        "Vehicle.Types.Motorcycle": false,
        "Vehicle.Types.Bus": false,
        "Vehicle.Types.Truck": false
      }
    }
  },
  "AlarmInput": {
    "1": false
  },
  "AlarmOutput": {
    "1": false
  },
  "AudioOutput": {
    "1": false
  },
  "SystemEvent": {
    "CPUFanError": false,
    "LeftFanError": false,
    "RightFanError": false,
    "PowerOn": true,
    "PowerReboot": false,

```

```

"ConfigChange": false,
"Backup": false,
"FWUpdate": false,
"FactoryReset": false,
"HDDFull": false,
"HDDFail": false,
"HDDNone": false,
"Recording": true,
"TimeChange": false,
"Network": {
    "1": true,
    "2": true,
    "3": false,
    "4": false
},
"InternalHDDerase": false,
"AdminLogin": true,
"RecordFiltering": false,
"NetCamTrafficOverflow": false,
"RecordingError": false,
"OverwriteDecoding": false,
"EndofFrame": false,
"RAIDEvents": [
    {
        "RAID": 1,
        "RAIDenable": false,
        "RAIDSetup": false,
        "RAIDBuilding": false,
        "RAIDBuildCancel": false,
        "RAIDBuildFail": false,
        "RAIDDegrade": false,
        "RAIDRebuildStart": false,
        "RAIDFail": false,
        "RAIDRebuildFail": false
    }
],
"RAIDDeviceAdd": false,
"RAIDRecordRestriction": false,
"iSCSIDisconnect": false,
"BeingUpdate": false,
"InternalHDDConnect": {

```

```

        "1": false
    },
    "BatteryFail": false,
    "RecordFrameDrop": false,
    "DualSMPSFail": true,
    "USBHDDConnect": false,
    "DSPDisplayStart": true,
    "DSPVASystemStart": false,
    "AMDLoadFail": false,
    "AlarmReset": false,
    "NewFWAvailable": false,
    "PasswordChange": false,
    "ConfigRestore": false
}
}

```

Checking the status of Alarm Input 1

REQUEST

```

http://<Device IP>/stw-
cgi/eventstatus.cgi?msubmenu=eventstatus&action=check&AlarmInput=1

```

TEXT RESPONSE

```

HTTP/1.0 200 OK
Content-type: text/plain
<Body>

```

```

AlarmInput.1=False

```

JSON RESPONSE

```

HTTP/1.0 200 OK
Content-type: application/json
<Body>

```

```

{
  "AlarmInput": {
    "1": false
  }
}

```

```
}  
}
```

Checking whether motion detection on Channel 0 is activated or deactivated

REQUEST

```
http://<Device IP>/stw-  
cgi/eventstatus.cgi?msubmenu=eventstatus&action=check&Channel.0.EventType=Mo  
tionDetection
```

TEXT RESPONSE

```
HTTP/1.0 200 OK  
Content-type: text/plain  
<Body>
```

```
Channel.0.MotionDetection=False
```

JSON RESPONSE

```
HTTP/1.0 200 OK  
Content-type: text/plain  
<Body>
```

```
{  
  "ChannelEvent": [  
    {  
      "Channel": 0,  
      "MotionDetection": false  
    }  
  ]  
}
```

Checking whether video analytics on Channel 0 is activated or deactivated

Unlike other event types, VideoAnalytics produces the status of related events.

REQUEST

```
http://<Device IP>/stw-
```



```
cgi/eventstatus.cgi?msubmenu=eventstatus&action=check&Channel.0.EventType=VideoAnalytics
```

TEXT RESPONSE

```
HTTP/1.0 200 OK  
Content-type: text/plain  
<Body>
```

```
Channel.0.VideoAnalytics.Passing=False  
Channel.0.VideoAnalytics.Entering=False  
Channel.0.VideoAnalytics.Exiting=False  
Channel.0.VideoAnalytics.Appearing=False  
Channel.0.VideoAnalytics.Disappearing=False
```

JSON RESPONSE

```
HTTP/1.0 200 OK  
Content-type: application/json  
<Body>
```

```
{  
  "ChannelEvent": [  
    {  
      "Channel": 0,  
      "VideoAnalytics": {  
        "Passing": false,  
        "Entering": false,  
        "Exiting": false,  
        "Appearing": false,  
        "Disappearing": false  
      }  
    }  
  ]  
}
```

5.1.6. Monitoring status

The **monitor** submenu requests the current event status on a certain time interval (specified with the **Periodicity** parameter), irrespective of whether the event occurred or not (state changed or not).

The status is represented with the value True (for activated) or False (for deactivated).

Continuously monitoring the status of face detection events on Channel 0 and the alarm input

REQUEST

```
http://<Device IP>/stw-  
cgi/eventstatus.cgi?msubmenu=eventstatus&action=monitor&Channel.0.EventType=  
FaceDetection&AlarmInput=1
```

TEXT RESPONSE

```
HTTP/1.1 200 OK  
Content-Type: multipart/x-mixed-replace; boundary=SamsungTechwin  
<Body>
```

```
--SamsungTechwin  
Content-Type: text/plain  
  
Channel.0.FaceDetection=False  
AlarmInput.1=False  
  
--SamsungTechwin
```

JSON RESPONSE

```
HTTP/1.1 200 OK  
Content-Type: multipart/x-mixed-replace; boundary=SamsungTechwin  
<Body>
```

```
--SamsungTechwin  
  
Content-Type: application/json  
{  
  "ChannelEvent": [  
    {  
      "Channel": 0,  
      "FaceDetection": false  
    }  
  ],  
  "AlarmInput": {
```

```
        "1": false
    }
}
--SamsungTechwin
```

Checking for any settings changed in the camera

If there have been any changes in settings, ChangedConfigURI shows the CGI URL of the changed settings. If AttributeUpdate shows as True, it indicates that the device's attribute has changed.

REQUEST

```
http://<Device IP>/stw-  
cgi/eventstatus.cgi?msubmenu=eventstatus&action=monitor
```

TEXT RESPONSE

```
HTTP/1.1 200 OK
```

```
Content-Type: multipart/x-mixed-replace; boundary=SamsungTechwin
```

```
<Body>
```

```
--SamsungTechwin
```

```
Content-Type: text/plain
```

```
Channel.0.MotionDetection=False
```

```
Channel.0.MotionDetection.RegionID.1=False
```

```
Channel.0.MotionDetection.RegionID.1.Level=0
```

```
Channel.0.Tampering=False
```

```
Channel.0.DefocusDetection=False
```

```
Channel.0.Profile.1.DigitalAutoTracking=False
```

```
Channel.0.Profile.2.DigitalAutoTracking=False
```

```
Channel.0.Profile.3.DigitalAutoTracking=False
```

```
Channel.0.Profile.4.DigitalAutoTracking=False
```

```
Channel.0.Profile.5.DigitalAutoTracking=False
```

```
Channel.0.Profile.6.DigitalAutoTracking=False
```

```
Channel.0.Profile.7.DigitalAutoTracking=False
```

```
Channel.0.Profile.8.DigitalAutoTracking=False
```

```
Channel.0.Profile.9.DigitalAutoTracking=False
```

```
Channel.0.Profile.10.DigitalAutoTracking=False
```

```
Channel.0.AudioDetection=False
Channel.0.VideoAnalytics.Passing=False
Channel.0.VideoAnalytics Entering=False
Channel.0.VideoAnalytics.Exiting=False
Channel.0.VideoAnalytics.Appearing=False
Channel.0.VideoAnalytics.Disappearing=False
Channel.0.ShockDetection=False
Channel.0.TemperatureChangeDetection.RegionID.1=False
AlarmInput.1=False
AlarmOutput.1=False
SystemEvent.PowerReboot=False
SystemEvent.TimeChange=False
SystemEvent.ConfigChange=False
SystemEvent.FWUpdate=False
SystemEvent.FactoryReset=False
SystemEvent.ConfigurationBackup=False
SystemEvent.ConfigurationRestore=False
SystemEvent.SDFormat=False
SystemEvent.SDFail=False
SystemEvent.SDFull=False
SystemEvent.SDInsert=False
SystemEvent.SDRemove=False
SystemEvent.NASFormat=False
SystemEvent.NASFail=False
SystemEvent.NASFull=False
SystemEvent.NASConnect=False
SystemEvent.NASDisconnect=True
--SamsungTechwin
Content-Type: text/plain
ChangedConfigURI=eventsources.cgi?submenu=thermaldetectionmode
SystemEvent.ConfigChange=True
AttributeUpdate=True

--SamsungTechwin

Content-Type: text/plain
```

JSON RESPONSE

```
HTTP/1.1 200 OK
Content-Type: multipart/x-mixed-replace; boundary=SamsungTechwin
```

<Body>

--SamsungTechwin

Content-Type: application/json

```
{
  "ChannelEvent": [
    {
      "Channel": 0,
      "MotionDetection": false,
      "MotionDetectionRegions": {
        "1": false
      },
      "MotionDetectionRegionsLevel": {
        "1": 0
      },
      "Tampering": false,
      "DefocusDetection": false,
      "DigitalAutoTracking": {
        "Profiles": {
          "1": false,
          "2": false,
          "3": false,
          "4": false,
          "5": false,
          "6": false,
          "7": false,
          "8": false,
          "9": false,
          "10": false
        }
      },
      "AudioDetection": false,
      "ShockDetection": false,
      "VideoAnalytics": {
        "Passing": false,
        "Entering": false,
        "Exiting": false,
        "Appearing": false,
        "Disappearing": false
      }
    }
  ]
}
```

```

        },
        "TemperatureChangeDetection": false,
        "TemperatureChangeDetectionRegions": {
            "1": false
        }
    },
    ],
    "AlarmInput": {
        "1": false
    },
    "AlarmOutput": {
        "1": false
    },
    "SystemEvent": {
        "PowerReboot": false,
        "TimeChange": false,
        "ConfigChange": false,
        "FWUpdate": false,
        "FactoryReset": false,
        "ConfigurationBackup": false,
        "ConfigurationRestore": false,
        "SDFormat": false,
        "SDFail": false,
        "SDFull": false,
        "SDInsert": false,
        "SDRemove": false,
        "NASFormat": false,
        "NASFail": false,
        "NASFull": false,
        "NASConnect": false,
        "NASDisconnect": true
    }
}
--SamsungTechwin

Content-Type: application/json

{
    "ChangedConfigURI": "eventsources.cgi?msubmenu=thermaldetectionmode",
    "SystemEvent": {
        "ConfigChange": true,

```

```
"AttributeUpdate": true
}
}

--SamsungTechwin

Content-Type: application/json
```

5.1.7. Requesting changed events

The **monitordiff** submenu initially requests the status of all events and later makes requests only when an event occurs (change from previous state), which is different from the **monitor** submenu requesting the event status periodically.

The status is represented with the value True (for activated) or False (for deactivated).

Requesting changed status motion detection events for Channel 0 only

REQUEST

```
http://<Device IP>/stw-
cgi/eventstatus.cgi?msubmenu=eventstatus&action=monitordiff&Channel.0.EventType=MotionDetection
```

TEXT RESPONSE

```
HTTP/1.1 200 OK
Content-Type: multipart/x-mixed-replace; boundary=SamsungTechwin
<Body>
```

```
--SamsungTechwin

Content-Type: text/plain
Channel.0.MotionDetection=False
Channel.0.MotionDetection.RegionID.1=False
Channel.0.MotionDetection.RegionID.1.Level=0

--SamsungTechwin
```

JSON RESPONSE

```
HTTP/1.1 200 OK
```

```
Content-Type: multipart/x-mixed-replace; boundary=SamsungTechwin
```

```
<Body>
```

```
--SamsungTechwin
```

```
Content-Type: application/json
```

```
{  
  "ChannelEvent": [  
    {  
      "Channel": 0,  
      "MotionDetection": false,  
      "MotionDetectionRegions": {  
        "1": false  
      },  
      "MotionDetectionRegionsLevel": {  
        "1": 0  
      }  
    }  
  ]  
}
```

```
--SamsungTechwin
```

Requesting all changed events

If there have been any changes in settings, ChangedConfigURI shows the CGI URL of the changed settings.

REQUEST

```
http://<Device IP>/stw-  
cgi/eventstatus.cgi?msubmenu=eventstatus&action=monitordiff
```

TEXT RESPONSE

```
HTTP/1.1 200 OK
```

```
Content-Type: multipart/x-mixed-replace; boundary=SamsungTechwin
```

```
<Body>
```


--SamsungTechwin

Content-Type: text/plain

Channel.0.MotionDetection=False
Channel.0.MotionDetection.RegionID.1=False
Channel.0.MotionDetection.RegionID.1.Level=0
Channel.0.Tampering=False
Channel.0.DefocusDetection=False
Channel.0.Profile.1.DigitalAutoTracking=False
Channel.0.Profile.2.DigitalAutoTracking=False
Channel.0.Profile.3.DigitalAutoTracking=False
Channel.0.Profile.4.DigitalAutoTracking=False
Channel.0.Profile.5.DigitalAutoTracking=False
Channel.0.Profile.6.DigitalAutoTracking=False
Channel.0.Profile.7.DigitalAutoTracking=False
Channel.0.Profile.8.DigitalAutoTracking=False
Channel.0.Profile.9.DigitalAutoTracking=False
Channel.0.Profile.10.DigitalAutoTracking=False
Channel.0.AudioDetection=False
Channel.0.VideoAnalytics.Passing=False
Channel.0.VideoAnalytics.Entering=False
Channel.0.VideoAnalytics.Exiting=False
Channel.0.VideoAnalytics.Appearing=False
Channel.0.VideoAnalytics.Disappearing=False
Channel.0.ShockDetection=False
Channel.0.TemperatureChangeDetection.RegionID.1=False
AlarmInput.1=False
AlarmOutput.1=False
SystemEvent.PowerReboot=False
SystemEvent.TimeChange=False
SystemEvent.ConfigChange=False
SystemEvent.FWUpdate=False
SystemEvent.FactoryReset=False
SystemEvent.ConfigurationBackup=False
SystemEvent.ConfigurationRestore=False
SystemEvent.SDFormat=False
SystemEvent.SDFail=False
SystemEvent.SDFull=False
SystemEvent.SDInsert=False
SystemEvent.SDRemove=False

```
SystemEvent.NASFormat=False
SystemEvent.NASFail=False
SystemEvent.NASFull=False
SystemEvent.NASConnect=False
SystemEvent.NASDisconnect=True
--SamsungTechwin
Content-Type: text/plain
ChangedConfigURI=media.cgi?msubmenu=videoprofile
SystemEvent.ConfigChange=True

--SamsungTechwin
```

JSON RESPONSE

HTTP/1.1 200 OK

Content-Type: multipart/x-mixed-replace; boundary=SamsungTechwin

<Body>

```
--SamsungTechwin

Content-Type: application/json
{
  "ChannelEvent": [
    {
      "Channel": 0,
      "MotionDetection": false,
      "MotionDetectionRegions": {
        "1": false
      },
      "MotionDetectionRegionsLevel": {
        "1": 0
      },
      "Tampering": false,
      "DefocusDetection": false,
      "DigitalAutoTracking": {
        "Profiles": {
          "1": false,
          "2": false,
          "3": false,

```

```

        "4": false,
        "5": false,
        "6": false,
        "7": false,
        "8": false,
        "9": false,
        "10": false
    }
},
"AudioDetection": false,
"ShockDetection": false,
"VideoAnalytics": {
    "Passing": false,
    "Entering": false,
    "Exiting": false,
    "Appearing": false,
    "Disappearing": false
},
"TemperatureChangeDetection": false,
"TemperatureChangeDetectionRegions": {
    "1": false
}
}
],
"AlarmInput": {
    "1": false
},
"AlarmOutput": {
    "1": false
},
"SystemEvent": {
    "PowerReboot": false,
    "TimeChange": false,
    "ConfigChange": false,
    "FWUpdate": false,
    "FactoryReset": false,
    "ConfigurationBackup": false,
    "ConfigurationRestore": false,
    "SDFormat": false,
    "SDFail": false,
    "SDFull": false,

```

```

        "SDInsert": false,
        "SDRemove": false,
        "NASFormat": false,
        "NASFail": false,
        "NASFull": false,
        "NASConnect": false,
        "NASDisconnect": true
    }
}
--SamsungTechwin

Content-Type: application/json

{
    "ChangedConfigURI": "media.cgi?submenu=videoprofile",
    "SystemEvent": {
        "ConfigChange": true
    }
}

--SamsungTechwin

```

Requesting changed status for motion detection events with SchemaBased

REQUEST

```

http://<Device IP>/stw-
cgi/eventstatus.cgi?submenu=eventstatus&action=monitordiff&SchemaBased=True

```

If there is an OpenSDK event, the event type & meta type response is as follows:

JSON RESPONSE

```

HTTP/1.1 200 OK
Content-Type: multipart/x-mixed-replace; boundary=SamsungTechwin
<Body>

```

```

--SamsungTechwin
{
    "EventStatus": [
        {

```

```

    "EventName": "OpenSDK",
    "Time": "2020-04-21T14:20:59.336+00:00",
    "Source": {
        "Channel": 0,
        "AppName": "test_dynamicEvent",
        "AppID": "test_dynamicEvent",
        "AppEvent": "LicensePlateNumber",
        "Type": "Event"
    },
    "Data": {
        "State": true
    }
},
{
    "EventName": "ObjectDetection",
    "Time": "2020-04-21T14:20:59.336+00:00",
    "Source": {
        "Channel": 0
    },
    "Data": {
        "State": true,
        "ObjectTypes": "Face, Vehicle",
        "ObjectTypeDetails":
"Vehicle.Types.Bicycle,Vehicle.Types.Truck"
    }
},
{
    "EventName": "SocialDistancingViolation",
    "Time": "2020-04-21T14:20:59.336+00:00",
    "Source": {
        "Channel": 0
    },
    "Data": {
        "State": false,
        "ObjectIDs": []
    }
}
]
}

```

--SamsungTechwin

```
Content-type:application/json; charset=utf-8
```

```
{
  "EventStatus": [
    {
      "EventName": "OpenSDK",
      "Time": "2020-04-21T14:20:59.336+00:00",
      "Source": {
        "Channel": 0,
        "AppName": "test_dynamicEvent",
        "AppID": "test_dynamicEvent",
        "AppEvent": "LicensePlateNumber",
        "Type": "Meta"
      },
      "Data": {
        "Info": "<tt:Message><tt:Source><tt:SimpleItem
Name=\"VideoSourceToken\" Value=\"0\"/></tt:Source><tt:Data><tt:SimpleItem
Name=\"LicensePlateNumber\" Value=\"ABC-1234\"/></tt:Data></tt:Message>"
      }
    }
  ]
}
--SamsungTechwin
```

5.1.8. Requesting schema based events response

All events have schema and for this schema based request SUNAPI can show the schema based response.

If you want to know which schema it is, please refer to "5.5 EventStatusSchema".

Requesting Schema based response

REQUEST

```
http://<Device IP>/stw-
cgi/eventstatus.cgi?submenu=eventstatus&action=check&SchemaBased=True
```

TEXT RESPONSE

```
HTTP/1.1 200 OK
Content-Type: multipart/x-mixed-replace; boundary=SamsungTechwin
<Body>
```

```
AlarmInput.1=False
AlarmOutput.1=False
AlarmOutput.2=False
Channel.0.MotionDetection=False
Channel.0.MotionDetection.RegionID.1=False
Channel.0.MotionDetection.RegionID.1.Level=0
Channel.0.Tampering=False
Channel.0.AudioDetection=False
Channel.0.VideoAnalytics.Passing=False
Channel.0.VideoAnalytics.Intrusion=False
Channel.0.VideoAnalytics Entering=False
Channel.0.VideoAnalytics.Exiting=False
Channel.0.VideoAnalytics.Appearing=False
Channel.0.VideoAnalytics.Loitering=False
Channel.0.AudioAnalytics.Scream=False
Channel.0.AudioAnalytics.Gunshot=False
Channel.0.AudioAnalytics.Explosion=False
Channel.0.AudioAnalytics.GlassBreak=False
Channel.0.BoxTemperatureDetection=False
SystemEvent.TimeChange=False
SystemEvent.PowerReboot=False
SystemEvent.FWUpdate=False
SystemEvent.FactoryReset=False
SystemEvent.ConfigurationBackup=False
SystemEvent.ConfigurationRestore=False
SystemEvent.ConfigChange=False
SystemEvent.SDFormat=False
SystemEvent.SDFail=False
SystemEvent.SDFull=False
SystemEvent.SDInsert=False
SystemEvent.SDRemove=True
SystemEvent.NASConnect=False
SystemEvent.NASDisconnect=True
SystemEvent.NASFail=False
SystemEvent.NASFull=False
SystemEvent.NASFormat=False
```

JSON RESPONSE

```
HTTP/1.1 200 OK
Content-Type: multipart/x-mixed-replace; boundary=SamsungTechwin
```

<Body>

```
{
  "EventStatus": [
    {
      "EventName": "AlarmInput",
      "Time": "2019-01-22T22:57:41.870+00:00",
      "Source": {
        "Channel": 0
      },
      "Data": {
        "State": false
      }
    },
    {
      "EventName": "AlarmOutput",
      "Time": "2019-01-22T22:57:41.871+00:00",
      "Source": {
        "Channel": 0
      },
      "Data": {
        "State": false
      }
    },
    {
      "EventName": "AlarmOutput",
      "Time": "2019-01-22T22:57:41.871+00:00",
      "Source": {
        "Channel": 0
      },
      "Data": {
        "State": false
      }
    },
    {
      "EventName": "MotionDetection",
      "Time": "2019-01-22T22:57:41.871+00:00",
      "Source": {
        "Channel": 0,
        "ROIID": 1
      }
    }
  ]
}
```



```

    },
    "Data": {
      "State": false,
      "Level": 0
    }
  },
  {
    "EventName": "Tampering",
    "Time": "2019-01-22T22:57:41.871+00:00",
    "Source": {
      "Channel": 0
    },
    "Data": {
      "State": false
    }
  },
  {
    "EventName": "AudioDetection",
    "Time": "2019-01-22T22:57:41.871+00:00",
    "Source": {
      "Channel": 0
    },
    "Data": {
      "State": false
    }
  },
  {
    "EventName": "AudioAnalytics.Scream",
    "Time": "2019-01-22T22:57:41.871+00:00",
    "Source": {
      "Channel": 0
    },
    "Data": {
      "State": false
    }
  },
  {
    "EventName": "AudioAnalytics.Gunshot",
    "Time": "2019-01-22T22:57:41.871+00:00",
    "Source": {
      "Channel": 0
    }
  }
}

```

```

    },
    "Data": {
        "State": false
    }
},
{
    "EventName": "AudioAnalytics.Explosion",
    "Time": "2019-01-22T22:57:41.871+00:00",
    "Source": {
        "Channel": 0
    },
    "Data": {
        "State": false
    }
},
{
    "EventName": "AudioAnalytics.GlassBreak",
    "Time": "2019-01-22T22:57:41.871+00:00",
    "Source": {
        "Channel": 0
    },
    "Data": {
        "State": false
    }
},
{
    "EventName": "ShockDetection",
    "Time": "2019-01-22T22:57:41.871+00:00",
    "Source": {
        "Channel": 0
    },
    "Data": {
        "State": false
    }
},
{
    "EventName": "BoxTemperatureDetection",
    "Time": "2019-01-22T22:57:41.871+00:00",
    "Source": {
        "Channel": 0,
        "ROIID": 0
    }
}

```

```

    },
    "Data": {
        "State": false
    }
},
{
    "EventName": "SocialDistancingViolation",
    "Time": "2020-04-21T14:20:59.336+00:00",
    "Source": {
        "Channel": 0
    },
    "Data": {
        "State": true,
        "ObjectIDs": [
            223,
            222,
            333
        ]
    }
},
{
    "EventName": "OpenSDK",
    "Time": "2000-01-01T01:35:35.254+00:00",
    "Source": {
        "Channel": 0,
        "AppName": "test_dynamicEvent",
        "AppID": "test_dynamicEvent",
        "AppEvent": "LicensePlateNumber",
        "Type": "Event"
    },
    "Data": {
        "State": true
    }
},
{
    "EventName": "SystemEvent.TimeChange",
    "Time": "2019-01-22T22:57:41.871+00:00",
    "Source": {
        "Channel": 0
    },
    "Data": {

```

```

        "State": false
    },
    {
        "EventName": "SystemEvent.PowerReboot",
        "Time": "2019-01-22T22:57:41.871+00:00",
        "Source": {
            "Channel": 0
        },
        "Data": {
            "State": false
        }
    },
    {
        "EventName": "SystemEvent.FWUpdate",
        "Time": "2019-01-22T22:57:41.871+00:00",
        "Source": {
            "Channel": 0
        },
        "Data": {
            "State": false
        }
    },
    {
        "EventName": "SystemEvent.FactoryReset",
        "Time": "2019-01-22T22:57:41.872+00:00",
        "Source": {
            "Channel": 0
        },
        "Data": {
            "State": false
        }
    },
    {
        "EventName": "SystemEvent.ConfigurationBackup",
        "Time": "2019-01-22T22:57:41.872+00:00",
        "Source": {
            "Channel": 0
        },
        "Data": {
            "State": false
        }
    }

```

```

    }
  },
  {
    "EventName": "SystemEvent.ConfigurationRestore",
    "Time": "2019-01-22T22:57:41.872+00:00",
    "Source": {
      "Channel": 0
    },
    "Data": {
      "State": false
    }
  },
  {
    "EventName": "SystemEvent.ConfigChange",
    "Time": "2019-01-22T22:57:41.872+00:00",
    "Source": {
      "Channel": 0
    },
    "Data": {
      "State": false
    }
  },
  {
    "EventName": "SystemEvent.SDFormat",
    "Time": "2019-01-22T22:57:41.872+00:00",
    "Source": {
      "Channel": 0
    },
    "Data": {
      "State": false
    }
  },
  {
    "EventName": "SystemEvent.SDFail",
    "Time": "2019-01-22T22:57:41.872+00:00",
    "Source": {
      "Channel": 0
    },
    "Data": {
      "State": false
    }
  }
}

```

```

    },
    {
      "EventName": "SystemEvent.SDFull",
      "Time": "2019-01-22T22:57:41.872+00:00",
      "Source": {
        "Channel": 0
      },
      "Data": {
        "State": false
      }
    },
    {
      "EventName": "SystemEvent.SDInsert",
      "Time": "2019-01-22T22:57:41.872+00:00",
      "Source": {
        "Channel": 0
      },
      "Data": {
        "State": false
      }
    },
    {
      "EventName": "SystemEvent.SDRemove",
      "Time": "2019-01-22T22:57:41.872+00:00",
      "Source": {
        "Channel": 0
      },
      "Data": {
        "State": true
      }
    },
    {
      "EventName": "SystemEvent.NASConnect",
      "Time": "2019-01-22T22:57:41.872+00:00",
      "Source": {
        "Channel": 0
      },
      "Data": {
        "State": false
      }
    }
  ],

```

```

{
  "EventName": "SystemEvent.NASDisconnect",
  "Time": "2019-01-22T22:57:41.872+00:00",
  "Source": {
    "Channel": 0
  },
  "Data": {
    "State": true
  }
},
{
  "EventName": "SystemEvent.NASFail",
  "Time": "2019-01-22T22:57:41.872+00:00",
  "Source": {
    "Channel": 0
  },
  "Data": {
    "State": false
  }
},
{
  "EventName": "SystemEvent.NASFull",
  "Time": "2019-01-22T22:57:41.872+00:00",
  "Source": {
    "Channel": 0
  },
  "Data": {
    "State": false
  }
},
{
  "EventName": "SystemEvent.NASFormat",
  "Time": "2019-01-22T22:57:41.872+00:00",
  "Source": {
    "Channel": 0
  },
  "Data": {
    "State": false
  }
}
]

```

```
}
```

5.2. Push Notification

5.2.1. Description

The **Pushnotification** submenu is used to configure push notification feature in NVR.

NOTE | This chapter applies to the NVR only.

Access level

Action	NVR
view	User
set	User

5.2.2. Syntax

```
http://<Device IP>/stw-cgi/eventstatus.cgi?msubmenu=  
pushnotification&action=<value> [&<parameter>=<value>]
```

5.2.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads current pushnotification settings
set	Enable	REQ, RES	<bool> True, False	Enables or disables push notifications

5.2.4. Examples

5.2.5. Getting the current pushnotification settings

REQUEST

```
http://<Device IP>/stw-  
cgi/eventstatus.cgi?msubmenu=pushnotification&action=view
```

TEXT RESPONSE

```
HTTP/1.0 200 OK  
Content-type: text/plain
```



```
<Body>
```

```
Enable=True
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{

  "Enable":true

}
```

5.2.6. Setting the current pushnotification settings

REQUEST

```
http://<Device IP>/stw-
cgi/eventstatus.cgi?msubmenu=pushnotification&action=set&Enable=False
```

5.3. ONVIF Event Topic

5.3.1. Description

This **eventscheme** submenu is used to choose whether old or new topics should be used in the ONVIF event service.

NOTE

This submenu is applicable for network camera & encoder only. Based on this setting, the onvif event service **GetEventProperties** response will change.

Access level

Action	Camera	Encoder
view	Admin	Admin
set	Admin	Admin

5.3.2. Syntax

```
http://<Device IP>/stw-cgi/eventstatus.cgi?msubmenu=
eventscheme&action=<value>[&<parameter>=<value>]
```

5.3.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads current ONVIF event topic settings
set	Type	REQ, RES	<enum> Proprietary, ONVIF	When set to Proprietary it will follow the old topic set; when set to ONVIF the new standard topics set will be used.

5.3.4. Examples

5.3.4.1. Getting the current eventscheme

REQUEST

```
http://<Device IP>/stw-cgi/eventstatus.cgi?msubmenu=eventscheme&action=view
```

JSON RESPONSE

```
HTTP/1.0 200 OK
Content-type: application/json
<Body>
```

```
{

  "Type": "Proprietary"

}
```

5.3.4.2. Setting the eventscheme

REQUEST

```
http://<Device IP>/stw-
cgi/eventstatus.cgi?msubmenu=eventscheme&action=set&Type=ONVIF
```

5.4. Metadataschema

5.4.1. Description

This **metadataschema** submenu provides schema of metadata events generated from the camera when an event occurs.

NOTE

This submenu is applicable for network camera.

Access level

Action	Camera
view	Admin

5.4.2. Syntax

```
http://<Device IP>/stw-cgi/eventstatus.cgi?msubmenu=  
metadataschema&action=<value>[&<parameter>=<value>]
```

5.4.3. Parameters

Action	Parameter	Request/ Response	Type/ Value	Description
view				Reads current metadata schema settings

Action	Parameter	Request/Response	Type/Value	Description
	EventName	REQ, RES	<enum> AlarmInput, AlarmOutput, MotionDetection, VideoAnalytics, VideoLoss, FaceDetection, AudioDetection, AudioAnalytics, Tampering, DefocusDetection, ShockDetection,Temp eratureChangeDetecti on, FogDetection, Tracking, BoxTemperatureDete ction, ObjectDetection, MaskDetection, BodyTemperatureDet ection, ParkingDetection, SocialDistancingViolat ion, CallRequest, TamperingSwitch, DTMFReceived, ProximitySensor	Shows the event name's metadata schema.
	EventTopic	RES	<string>	ONVIF event topic associated with the Event
	EventSchema	RES	<string>	ONVIF event schema

5.4.4. Examples

5.4.5. Getting the ONVIF metadata eventschema

REQUEST

```
http://<Device IP>/stw-  
cgi/eventstatus.cgi?msubmenu=metadataschema&action=view
```

JSON RESPONSE

```
HTTP/1.0 200 OK
```

Content-type: application/json

<Body>

```
{
  "MetaDataSchema": [
    {
      "EventName": "AlarmInput",
      "EventTopic":
"tns1:Device/tns1:Trigger/tnssamsung:DigitalInput",
      "EventSchema":
"<tns1:Device><tns1:Trigger><tnssamsung:DigitalInput
wstop:topic=\"true\"><tt:MessageDescription><tt:Source><tt:SimpleItemDescrip
tion Name=\"Index\"
Type=\"xsd:int\"/></tt:Source><tt:Data><tt:SimpleItemDescription
Name=\"Level\"
Type=\"xsd:int\"/></tt:Data></tt:MessageDescription></tnssamsung:DigitalInpu
t></tns1:Trigger></tns1:Device>"
    },
    {
      "EventName": "AlarmOutput",
      "EventTopic": "tns1:Device/tns1:Trigger/tns1:Relay",
      "EventSchema": "<tns1:Device><tns1:Trigger><tns1:Relay
wstop:topic=\"true\"><tt:MessageDescription><tt:Source><tt:SimpleItemDescrip
tion Name=\"RelayToken\"
Type=\"tt:ReferenceToken\"/></tt:Source><tt:Data><tt:SimpleItemDescription
Name=\"RelayLogicalState\"
Type=\"xsd:int\"/></tt:Data></tt:MessageDescription></tns1:Relay></tns1:Trig
ger></tns1:Device>"
    },
    {
      "EventName": "MotionDetection",
      "EventTopic": "tns1:VideoAnalytics/tnssamsung:MotionDetection",
      "EventSchema": "<tns1:VideoAnalytics><tnssamsung:MotionDetection
wstop:topic=\"true\"><tt:MessageDescription><tt:Source><tt:SimpleItemDescrip
tion Name=\"Window\"
Type=\"xsd:int\"/></tt:Source><tt:Data><tt:SimpleItemDescription
Name=\"Motion\"
Type=\"xsd:int\"/></tt:Data></tt:MessageDescription></tnssamsung:MotionDetec
tion></tns1:VideoAnalytics>"
    },
  ],
}
```

```

{
    "EventName": "VideoAnalytics",
    "EventTopic": "tns1:VideoAnalytics/tnssamsung:VideoAnalytics",
    "EventSchema": "<tns1:VideoAnalytics><tnssamsung:VideoAnalytics
wstop:topic=\"true\"><tt:MessageDescription><tt:Source><tt:SimpleItemDescrip
tion Name=\"VideoSourceToken\"
Type=\"tt:ReferenceToken\"/></tt:Source><tt:Data><tt:SimpleItemDescription
Name=\"State\" Type=\"xsd:int\"/><tt:SimpleItemDescription Name=\"Action\"
Type=\"xsd:string\"/></tt:Data></tt:MessageDescription></tnssamsung:VideoAna
lytics></tns1:VideoAnalytics>"
},
{
    "EventName": "AudioDetection",
    "EventTopic": "tns1:AudioSource/tnssamsung:AudioDetection",
    "EventSchema": "<tns1:AudioSource><tnssamsung:AudioDetection
wstop:topic=\"true\"><tt:MessageDescription><tt:Source><tt:SimpleItemDescrip
tion Name=\"AudioSourceToken\"
Type=\"tt:ReferenceToken\"/></tt:Source><tt:Data><tt:SimpleItemDescription
Name=\"State\"
Type=\"xsd:int\"/></tt:Data></tt:MessageDescription></tnssamsung:AudioDetect
ion></tns1:AudioSource>"
},
{
    "EventName": "AudioAnalytics",
    "EventTopic": "tns1:AudioAnalytics/Audio/DetectedSound",
    "EventSchema": "<tns1:AudioAnalytics><Audio><DetectedSound
wstop:topic=\"true\"><tt:MessageDescription
IsProperty=\"false\"><tt:Source><tt:SimpleItemDescription
Name=\"AudioSourceConfigurationToken\"
Type=\"tt:ReferenceToken\"/><tt:SimpleItemDescription
Name=\"AudioAnalyticsConfigurationToken\"
Type=\"tt:ReferenceToken\"/></tt:Source><tt:Data><tt:SimpleItemDescription
Name=\"isSoundDetected\" Type=\"xsd:boolean\"/><tt:SimpleItemDescription
Name=\"UTCTime\" Type=\"xsd:dateTime\"/><tt:ElementItemDescription
Name=\"AudioClassifications\"
Type=\"tt:AudioClassDescriptor\"/></tt:Data></tt:MessageDescription></Detect
edSound></Audio></tns1:AudioAnalytics>"
},
{
    "EventName": "Tampering",
    "EventTopic": "tns1:VideoSource/tnssamsung:TamperingDetection",

```

```

        "EventSchema": "<tns1:VideoSource><tnssamsung:TamperingDetection
wstop:topic=\"true\"><tt:MessageDescription><tt:Source><tt:SimpleItemDescrip
tion Name=\"VideoSourceToken\"
Type=\"tt:ReferenceToken\"/></tt:Source><tt:Data><tt:SimpleItemDescription
Name=\"Tampering\"
Type=\"xsd:int\"/></tt:Data></tt:MessageDescription></tnssamsung:TamperingDe
tection></tns1:VideoSource>"
    },
    {
        "EventName": "ShockDetection",
        "EventTopic": "tns1:VideoSource/tnssamsung:ShockDetection",
        "EventSchema": "<tns1:VideoSource><tnssamsung:ShockDetection
wstop:topic=\"true\"><tt:MessageDescription><tt:Source><tt:SimpleItemDescrip
tion Name=\"VideoSource\"
Type=\"tt:ReferenceToken\"/></tt:Source><tt:Data><tt:SimpleItemDescription
Name=\"State\"
Type=\"xsd:boolean\"/></tt:Data></tt:MessageDescription></tnssamsung:ShockDe
tection></tns1:VideoSource>"
    },
    {
        "EventName": "ObjectDetection",
        "EventTopic": "tns1:RuleEngine/ObjectDetection/Object",
        "EventSchema": "<tns1:RuleEngine><ObjectDetection><Object
wstop:topic=\"true\"><tt:MessageDescription
IsProperty=\"true\"><tt:Source><tt:SimpleItemDescription
Name=\"VideoSource\" Type=\"tt:ReferenceToken\"/><tt:SimpleItemDescription
Name=\"RuleName\"
Type=\"xsd:string\"/></tt:Source><tt:Data><tt:SimpleItemDescription
Name=\"ClassTypes\"
Type=\"xsd:string\"/></tt:Data></tt:MessageDescription></Object></ObjectDete
ction></tns1:RuleEngine>"
    },
    {
        "EventName": "SocialDistancingViolation",
        "EventTopic":
"tns1:RuleEngine/Detection/SocialDistancingViolation",
        "EventSchema":
"<tns1:RuleEngine><Detection><SocialDistancingViolation
wstop:topic=\"true\"><tt:MessageDescription
><tt:Source><tt:SimpleItemDescription Name=\"VideoSource\"
Type=\"tt:ReferenceToken\"/><tt:SimpleItemDescription Name=\"RuleName\"

```

```

Type=\ "xsd:string\ " /></tt:Source><tt:Data><tt:SimpleItemDescription
Name=\ "State\ " Type=\ "xsd:boolean\ " /> <tt:SimpleItemDescription
Name=\ "ObjectIDs\ "
Type=\ "tt:IntAttrList\ " /></tt:Data></tt:MessageDescription></SocialDistancin
gViolation></Detection></tns1:RuleEngine>"
    },
    {
        "EventName": "BoxTemperatureDetection",
        "EventTopic":
"tns1:VideoAnalytics/Radiometry/BoxTemperatureReading",
        "EventSchema":
"<tns1:VideoAnalytics><Radiometry><BoxTemperatureReading
wstop:topic=\ "true\ "><tt:MessageDescription><tt:Source><tt:SimpleItemDescrip
tion Name=\ "VideoSourceToken\ "
Type=\ "tt:ReferenceToken\ " /><tt:SimpleItemDescription
Name=\ "VideoAnalyticsConfigurationToken\ "
Type=\ "tt:ReferenceToken\ " /><tt:SimpleItemDescription
Name=\ "AnalyticsModuleName\ "
Type=\ "xsd:string\ " /></tt:Source><tt:Data><tt:ElementItemDescription
Name=\ "Reading\ "
Type=\ "ttr:BoxTemperatureReading\ " /><tt:SimpleItemDescription
Name=\ "TimeStamp\ "
Type=\ "xsd:dateTime\ " /></tt:Data></tt:MessageDescription></BoxTemperatureRea
ding></Radiometry></tns1:VideoAnalytics>"
    },
    {
        "EventName": "MotionDetection",
        "EventTopic": "tns1:VideoSource/MotionAlarm",
        "EventSchema": "<tns1:VideoSource><MotionAlarm
wstop:topic=\ "true\ "><tt:MessageDescription
IsProperty=\ "true\ "><tt:Source><tt:SimpleItemDescription Name=\ "Source\ "
Type=\ "tt:ReferenceToken\ " /></tt:Source><tt:Data><tt:SimpleItemDescription
Name=\ "State\ "
Type=\ "xsd:boolean\ " /></tt:Data></tt:MessageDescription></MotionAlarm></tns1
:VideoSource>"
    },
    {
        "EventName": "BoxTemperatureDetection",
        "EventTopic": "tns1:RuleEngine/Radiometry/BoxTemperatureAlarm",
        "EventSchema":
"<tns1:RuleEngine><Radiometry><BoxTemperatureAlarm

```



```

wstop:topic=\"true\"><tt:MessageDescription
IsProperty=\"true\"><tt:Source><tt:SimpleItemDescription
Name=\"VideoSourceConfigurationToken\"
Type=\"tt:ReferenceToken\"/><tt:SimpleItemDescription Name=\"RuleName\"
Type=\"xsd:string\"/></tt:Source><tt:Data><tt:SimpleItemDescription
Name=\"AlarmActive\"
Type=\"xsd:boolean\"/></tt:Data></tt:MessageDescription></BoxTemperatureAlar
m></Radiometry></tns1:RuleEngine>\"
    }
]
}

```

5.5. Event Status Schema

5.5.1. Description

This **eventstatusschema** submenu provides event schema of all events. This schema is applied in the evenstatus submenu with SchemaBased parameters.

NOTE

This submenu is applicable for network cameras and NVR only.

Access level

Action	Camera	NVR
view	Admin	User

5.5.2. Syntax

```

http://<Device IP>/stw-cgi/eventstatus.cgi?msubmenu=
eventstatusschema&action=<value>[&<parameter>=<value>]

```

5.5.3. Parameters

Action	Parameter	Request/Response	Type/Value	Description
view				Reads current event status schema settings

Action	Parameter	Request/ Response	Type/ Value	Description
	EventName	REQ, RES	<enum> AlarmInput, AlarmOutput, MotionDetection, FaceDetection, VideoLoss, Tampering, AudioDetection, DefocusDetection, FogDetection, ShockDetection, Tracking, PTZMotion, DigitalAutoTracking, VideoAnalytics, AudioAnalytics, Queue, SystemEvent, ConfigChange, TemperatureChanged etection, BoxTemperatureDete ction, ObjectDetection, OpenSDK, BodyTemperatureDet ection,ParkingDetecti on, SocialDistancingViolat ion, CallRequest, TamperingSwitch, DTMFReceived, ProximitySensor, MQTTSubscription	This parameter can only show the requested value's response.
	Language	REQ	<enum>	Requests the translated value for event topics. <div> Note This can be applicable only when MultiLanguageEventSchema is True in attributes. </div> <div>CAMERA ONLY</div>

5.5.4. Examples

5.5.5. Getting the eventstatusschema

REQUEST

```
http://<Device IP>/stw-  
cgi/eventstatus.cgi?msubmenu=eventstatusschema&action=view
```

TEXT RESPONSE

```
HTTP/1.0 200 OK  
Content-type: text/plain  
<Body>
```

```
EventStatus.1.Name=AlarmInput  
EventStatus.1.Schema.1.Name=AlarmInput.<int>  
EventStatus.1.Schema.1.Value=<boolean>  
EventStatus.2.Name=AlarmOutput  
EventStatus.2.Schema.1.Name=AlarmOutput.<int>  
EventStatus.2.Schema.1.Value=<boolean>  
EventStatus.3.Name=MotionDetection  
EventStatus.3.Schema.1.Name=Channel.<int>.MotionDetection  
EventStatus.3.Schema.1.Value=<boolean>  
EventStatus.3.Schema.2.Name=Channel.<int>.MotionDetection.RegionID.<int>  
EventStatus.3.Schema.2.Value=<boolean>  
EventStatus.3.Schema.3.Name=Channel.<int>.MotionDetection.RegionID.<int>.Level  
EventStatus.3.Schema.3.Value=<int>  
EventStatus.4.Name=Tampering  
EventStatus.4.Schema.1.Name=Channel.<int>.Tampering  
EventStatus.4.Schema.1.Value=<boolean>  
EventStatus.5.Name=AudioDetection  
EventStatus.5.Schema.1.Name=Channel.<int>.AudioDetection  
EventStatus.5.Schema.1.Value=<boolean>  
EventStatus.6.Name=VideoAnalytics  
EventStatus.6.Schema.1.Name=Channel.<int>.VideoAnalytics.Passing  
EventStatus.6.Schema.1.Value=<boolean>  
EventStatus.6.Schema.2.Name=Channel.<int>.VideoAnalytics.Passing.LineID.<int>  
>  
EventStatus.6.Schema.2.Value=<boolean>  
EventStatus.6.Schema.3.Name=Channel.<int>.VideoAnalytics.Intrusion  
EventStatus.6.Schema.3.Value=<boolean>  
EventStatus.6.Schema.4.Name=Channel.<int>.VideoAnalytics.Intrusion.DefinedAr
```

```

eaID.<int>
EventStatus.6.Schema.4.Value=<boolean>
EventStatus.6.Schema.5.Name=Channel.<int>.VideoAnalytics.Entering
EventStatus.6.Schema.5.Value=<boolean>
EventStatus.6.Schema.6.Name=Channel.<int>.VideoAnalytics.Entering.DefinedAreaID.<int>
EventStatus.6.Schema.6.Value=<boolean>
EventStatus.6.Schema.7.Name=Channel.<int>.VideoAnalytics.Exiting
EventStatus.6.Schema.7.Value=<boolean>
EventStatus.6.Schema.8.Name=Channel.<int>.VideoAnalytics.Exiting.DefinedAreaID.<int>
EventStatus.6.Schema.8.Value=<boolean>
EventStatus.6.Schema.9.Name=Channel.<int>.VideoAnalytics.Appearing
EventStatus.6.Schema.9.Value=<boolean>
EventStatus.6.Schema.10.Name=Channel.<int>.VideoAnalytics.Appearing.DefinedAreaID.<int>
EventStatus.6.Schema.10.Value=<boolean>
EventStatus.6.Schema.11.Name=Channel.<int>.VideoAnalytics.Loitering
EventStatus.6.Schema.11.Value=<boolean>
EventStatus.6.Schema.12.Name=Channel.<int>.VideoAnalytics.Loitering.DefinedAreaID.<int>
EventStatus.6.Schema.12.Value=<boolean>
EventStatus.7.Name=AudioAnalytics
EventStatus.7.Schema.1.Name=Channel.<int>.AudioAnalytics.Scream
EventStatus.7.Schema.1.Value=<boolean>
EventStatus.7.Schema.2.Name=Channel.<int>.AudioAnalytics.Gunshot
EventStatus.7.Schema.2.Value=<boolean>
EventStatus.7.Schema.3.Name=Channel.<int>.AudioAnalytics.Explosion
EventStatus.7.Schema.3.Value=<boolean>
EventStatus.7.Schema.4.Name=Channel.<int>.AudioAnalytics.GlassBreak
EventStatus.7.Schema.4.Value=<boolean>
EventStatus.8.Name=SystemEvent
EventStatus.8.Schema.1.Name=SystemEvent.TimeChange
EventStatus.8.Schema.1.Value=<boolean>
EventStatus.8.Schema.2.Name=SystemEvent.PowerReboot
EventStatus.8.Schema.2.Value=<boolean>
EventStatus.8.Schema.3.Name=SystemEvent.FWUpdate
EventStatus.8.Schema.3.Value=<boolean>
EventStatus.8.Schema.4.Name=SystemEvent.FactoryReset
EventStatus.8.Schema.4.Value=<boolean>
EventStatus.8.Schema.5.Name=SystemEvent.ConfigurationBackup

```

```

EventStatus.8.Schema.5.Value=<boolean>
EventStatus.8.Schema.6.Name=SystemEvent.ConfigurationRestore
EventStatus.8.Schema.6.Value=<boolean>
EventStatus.8.Schema.7.Name=SystemEvent.ConfigChange
EventStatus.8.Schema.7.Value=<boolean>
EventStatus.8.Schema.8.Name=ChangedConfigURI
EventStatus.8.Schema.8.Value=<string>
EventStatus.8.Schema.9.Name=SystemEvent.SDFormat
EventStatus.8.Schema.9.Value=<boolean>
EventStatus.8.Schema.10.Name=SystemEvent.SDFail
EventStatus.8.Schema.10.Value=<boolean>
EventStatus.8.Schema.11.Name=SystemEvent.SDFull
EventStatus.8.Schema.11.Value=<boolean>
EventStatus.8.Schema.12.Name=SystemEvent.SDInsert
EventStatus.8.Schema.12.Value=<boolean>
EventStatus.8.Schema.13.Name=SystemEvent.SDRemove
EventStatus.8.Schema.13.Value=<boolean>
EventStatus.8.Schema.14.Name=SystemEvent.NASConnect
EventStatus.8.Schema.14.Value=<boolean>
EventStatus.8.Schema.15.Name=SystemEvent.NASDisconnect
EventStatus.8.Schema.15.Value=<boolean>
EventStatus.8.Schema.16.Name=SystemEvent.NASFail
EventStatus.8.Schema.16.Value=<boolean>
EventStatus.8.Schema.17.Name=SystemEvent.NASFull
EventStatus.8.Schema.17.Value=<boolean>
EventStatus.8.Schema.18.Name=SystemEvent.NASFormat
EventStatus.8.Schema.18.Value=<boolean>
EventStatus.9.Name=BoxTemperatureDetection
EventStatus.9.Schema.1.Name=Channel.<int>.BoxTemperatureDetection
EventStatus.9.Schema.1.Value=<boolean>
EventStatus.9.Schema.2.Name=Channel.<int>.BoxTemperatureDetection.RegionID.<
int>
EventStatus.9.Schema.2.Value=<boolean>
EventStatus.10.Name=ObjectDetection
EventStatus.10.Schema.1.Name=Channel.<int>.ObjectDetection
EventStatus.10.Schema.1.Value=<boolean>
EventStatus.10.Schema.2.Name=Channel.<int>.ObjectDetection.Person
EventStatus.10.Schema.2.Value=<boolean>
EventStatus.10.Schema.3.Name=Channel.<int>.ObjectDetection.Vehicle
EventStatus.10.Schema.3.Value=<boolean>
EventStatus.10.Schema.4.Name=Channel.<int>.ObjectDetection.Face

```

```

EventStatus.10.Schema.4.Value=<boolean>
EventStatus.10.Schema.5.Name=Channel.<int>.ObjectDetection.LicensePlate
EventStatus.10.Schema.5.Value=<boolean>
EventStatus.10.Schema.6.Name=Channel.<int>.ObjectDetection.Detail.Vehicle.Types.Bicycle
EventStatus.10.Schema.6.Value=<boolean>
EventStatus.10.Schema.7.Name=Channel.<int>.ObjectDetection.Detail.Vehicle.Types.Car
EventStatus.10.Schema.7.Value=<boolean>
EventStatus.10.Schema.8.Name=Channel.<int>.ObjectDetection.Detail.Vehicle.Types.Motorcycle
EventStatus.10.Schema.8.Value=<boolean>
EventStatus.10.Schema.9.Name=Channel.<int>.ObjectDetection.Detail.Vehicle.Types.Bus
EventStatus.10.Schema.9.Value=<boolean>
EventStatus.10.Schema.10.Name=Channel.<int>.ObjectDetection.Detail.Vehicle.Types.Truck
EventStatus.10.Schema.10.Value=<boolean>
EventStatus.11.Schema.18.Name= Channel.<int>.BodyTemperatureDetection
EventStatus.11.Schema.18.Value=<boolean>
EventStatus.12.Name=SocialDistancingViolation
EventStatus.12.Schema.1.Name=Channel.<int>.SocialDistancingViolation
EventStatus.12.Schema.1.Value=<boolean>
EventStatus.12.Schema.2.Name=Channel.<int>.SocialDistancingViolation.ObjectIDs
EventStatus.12.Schema.2.Value=<csv>
EventStatus.13.Name=ParkingDetection
EventStatus.13.Schema.1.Name=Channel.<int>.ParkingDetection
EventStatus.13.Schema.1.Value=<boolean>

```

JSON RESPONSE

```

HTTP/1.1 200 OK
Content-Type: multipart/x-mixed-replace; boundary=SamsungTechwin
<Body>

```

```

{
  "type": "array",
  "items": [
    {
      "type": "object",

```

```

    "properties": {
      "Time": {
        "type": "string"
      },
      "EventName": {
        "enum": [
          "AlarmInput",
          "AlarmOutput"
        ]
      },
      "Source": {
        "type": "object",
        "properties": {
          "Channel": {
            "type": "number"
          },
          "SourceID": {
            "type": "number"
          }
        }
      },
      "Data": {
        "type": "object",
        "properties": {
          "State": {
            "type": "boolean"
          }
        }
      }
    }
  },
  {
    "type": "object",
    "properties": {
      "Time": {
        "type": "string"
      },
      "EventName": {
        "enum": [
          "Tampering",
          "AudioDetection",

```

```

        "BodyTemperatureDetection"
    ]
},
"Source": {
    "type": "object",
    "properties": {
        "Channel": {
            "type": "number"
        }
    }
},
"Data": {
    "type": "object",
    "properties": {
        "State": {
            "type": "boolean"
        }
    }
}
},
{
    "type": "object",
    "properties": {
        "Time": {
            "type": "string"
        },
        "EventName": {
            "enum": [
                "AudioAnalytics.Scream",
                "AudioAnalytics.Gunshot",
                "AudioAnalytics.Explosion",
                "AudioAnalytics.GlassBreak"
            ]
        },
        "Source": {
            "type": "object",
            "properties": {
                "Channel": {
                    "type": "number"
                }
            }
        }
    }
}

```



```

        }
    },
    "Data": {
        "type": "object",
        "properties": {
            "State": {
                "type": "boolean"
            }
        }
    }
},
{
    "type": "object",
    "properties": {
        "Time": {
            "type": "string"
        },
        "EventName": {
            "enum": [
                "MotionDetection"
            ]
        },
        "Source": {
            "type": "object",
            "properties": {
                "Channel": {
                    "type": "number"
                },
                "ROIID": {
                    "type": "number"
                }
            }
        }
    },
    "Data": {
        "type": "object",
        "properties": {
            "State": {
                "type": "boolean"
            },
            "Level": {

```

```

        "type": "number"
    }
}
}
},
{
    "type": "object",
    "properties": {
        "Time": {
            "type": "string"
        },
        "EventName": {
            "enum": [
                "BoxTemperatureDetection"
            ]
        },
        "Source": {
            "type": "object",
            "properties": {
                "Channel": {
                    "type": "number"
                },
                "ROIID": {
                    "type": "number"
                }
            }
        },
        "Data": {
            "type": "object",
            "properties": {
                "State": {
                    "type": "boolean"
                }
            }
        }
    }
},
{
    "type": "object",
    "properties": {

```

```

        "Time": {
            "type": "string"
        },
        "EventName": {
            "enum": [
                "ObjectDetection"
            ]
        },
        "Source": {
            "type": "object",
            "properties": {
                "Channel": {
                    "type": "number"
                }
            }
        },
        "Data": {
            "type": "object",
            "properties": {
                "State": {
                    "type": "boolean"
                },
                "ObjectTypes": {
                    "type": "string"
                },
                "ObjectTypeDetails": {
                    "type": "string"
                }
            }
        }
    },
    {
        "type": "object",
        "properties": {
            "Time": {
                "type": "string"
            },
            "EventName": {
                "enum": [
                    "VideoAnalytics.Intrusion",

```

```

        "VideoAnalytics.Exiting",
        "VideoAnalytics.Appearing",
        "VideoAnalytics.Loitering"
    ]
},
"Source": {
    "type": "object",
    "properties": {
        "Channel": {
            "type": "number"
        },
        "DefinedAreaID": {
            "type": "number"
        }
    }
},
"Data": {
    "type": "object",
    "properties": {
        "State": {
            "type": "boolean"
        }
    }
}
},
{
    "type": "object",
    "properties": {
        "Time": {
            "type": "string"
        },
        "EventName": {
            "enum": [
                "VideoAnalytics.Passing"
            ]
        }
    },
    "Source": {
        "type": "object",
        "properties": {

```

```

        "Channel": {
            "type": "number"
        },
        "LineID": {
            "type": "number"
        }
    },
    "Data": {
        "type": "object",
        "properties": {
            "State": {
                "type": "boolean"
            }
        }
    }
},
{
    "type": "object",
    "properties": {
        "Time": {
            "type": "string"
        },
        "EventName": {
            "enum": [
                "SystemEvent.TimeChange",
                "SystemEvent.PowerReboot",
                "SystemEvent.FWUpdate",
                "SystemEvent.FactoryReset",
                "SystemEvent.ConfigurationBackup",
                "SystemEvent.ConfigurationRestore",
                "SystemEvent.ConfigChange",
                "SystemEvent.SDFormat",
                "SystemEvent.SDFail",
                "SystemEvent.SDFull",
                "SystemEvent.SDInsert",
                "SystemEvent.SDRemove",
                "SystemEvent.NASConnect",
                "SystemEvent.NASDisconnect",
                "SystemEvent.NASFail",
            ]
        }
    }
}

```

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        "SystemEvent.NASFull",
        "SystemEvent.NASFormat"
    ]
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    "properties": {
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            "type": "number"
        }
    }
},
"Data": {
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    "properties": {
        "State": {
            "type": "boolean"
        }
    }
}
},
{
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    "properties": {
        "Time": {
            "type": "string"
        },
        "EventName": {
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            ]
        },
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            "properties": {
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                    "type": "number"
                },
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                    "type": "string"
                }
            }
        }
    }
}

```

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        }
    },
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            }
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    }
},
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                },
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                    "type": "string"
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                    "type": "string"
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                "Type": {
                    "enum": [

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```

        "Event"
    ]
}
},
"Data": {
    "type": "object",
    "properties": {
        "State": {
            "type": "boolean"
        }
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            "properties": {
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                    "type": "string"
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                "AppEvent": {
                    "type": "string"
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                "Type": {
                    "enum": [
                        "Meta"

```



```

    ]
  }
}
},
"Data": {
  "type": "object",
  "properties": {
    "Info": {
      "type": "string"
    }
  }
}
}
}
}
]
}

```