

Annex E (normative)

Motion detection

The region motion detector detects any motion against the specified motion region. The rule is configured for an area (region of interest on the image source), which can be armed or disarmed. The region may be defined by a polygon structure, but cannot be defined by both. Although this rule is defined within the context of the analytics service, it is intended to allow configuration of hardware motion detection as opposed to motion detection from scene description data. For a description of the parameters, see Table E.1.

```
<tt:RuleDescription Name="tt:MotionRegionDetector">
  <tt:Parameters>
    <tt:ElementItemDescription Name="MotionRegion"
Type="axt:MotionRegionConfig"/>
  </tt:Parameters>
  <tt:MessageDescription IsProperty="true">
    <tt:Source>
      <tt:SimpleItemDescription Name="VideoSource" Type="tt:ReferenceToken"/>
      <tt:SimpleItemDescription Name="RuleName" Type="xs:string"/>
    </tt:Source>
    <tt:Key/>
    <tt>Data>
      <tt:SimpleItemDescription Name="State" Type="xs:boolean"/>
    </tt>Data>
  </tt:MessageDescription>
</tt:RuleDescription>
```

The above rule description defines that a rule instance produces an event attached to the topic `tns1:RuleEngine/MotionRegionDetector/Motion` with the state field defined in Table E.3. Calling the `GetRuleOptions` operation with the `tt:MotionRegionDetector` type will return a `tt:MotionRegionConfigOptions` with parameters defined in Table E.2.

Table E.1 – Motion Region Detector Rule configuration parameters

Parameter Name	Description
Armed	Indicates if the Motion Region is armed (detecting motion) or disarmed (motion is not being detected).
Rectangle	Provides the points of a rectangle that is specified within a region defined by the Bounds element of VideoSourceConfiguration.
Polygon	Provides the points of a polygon that is specified within a region defined by the Bounds element of VideoSourceConfiguration. If the device does not support polygons, the points in the polygon shall represent a rectangle.
Sensitivity	Indicates the sensitivity level of the motion detector for this region. The sensitivity value is normalized where 0 represents the lower sensitivity where significant motion is required to trigger an alarm and 1 represents the higher sensitivity where very little motion is required to trigger an alarm.

Table E.2 – Motion region detector rule configuration options

Parameter name	Description
MaxRegions	The total number of motion region detector rules that can be created on the device.
DisarmSupport	True if the device supports disarming a motion region detector rule.
PolygonSupport	True if the device supports defining a region using a polygon instead of a rectangle. The rectangle points are still passed using a Polygon element if the device does not support polygon regions. In this case, the points provided in the Polygon element shall represent a rectangle.
PolygonLimits	For devices that support polygons with limitations on the number of points, provides the minimum and maximum number of points that can be defined in Polygon.
RuleNotification	Indicates the device will supply the name of the rule that triggered the motion.
SingleSensitivitySupport	Indicates the device can only support one sensitivity level for all defined motion detection regions. Changing the sensitivity for one region would be applied to all regions.

Table E.3 – Description of the motion region detector event fields

Parameter name	Description
State	True (motion is detected) or False (motion is not detected)

Annex F (normative)

Schema files

F.1 Device IO

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<?xml version="1.0" encoding="utf-8"?><?xml-stylesheet type="text/xsl"
href="../../ver20/util/onvif-wsdl-viewer.xsl"?>
<wsdl:definitions xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/"
  xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap12/"
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  xmlns:tds="http://www.onvif.org/ver10/device/wsdl"
  xmlns:tmd="http://www.onvif.org/ver10/deviceIO/wsdl"
  targetNamespace="http://www.onvif.org/ver10/deviceIO/wsdl">
  <wsdl:import namespace="http://www.onvif.org/ver10/device/wsdl"
    location="../../ver10/device/wsdl/devicemgmt.wsdl"/>
  <wsdl:types>
    <xs:schema xmlns:tt="http://www.onvif.org/ver10/schema"
      targetNamespace="http://www.onvif.org/ver10/deviceIO/wsdl"
      elementFormDefault="qualified" version="16.12">
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        schemaLocation="../../ver10/schema/onvif.xsd"/>
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```

```

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```

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```

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```

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