ONVIF™

ONVIF Specification Version 16.03
Release Notes

1. Summary

The ONVIF 16.03 release incorporates a number of major enhancements and minor clarifications for better interoperability among ONVIF conformant clients and devices. The changes themselves are described in details in the list below chapters 2 and 3.

Note that this release is the first using a date related version number instead of using the core spec version.

2. Additions

This release adds 802.1X configuration to the Advanced Security Specification. See section 5.4 of the Advanced Security Specification for the related interface definitions.

IEEE 802.1X is an IEEE standard for port based network access control for the purpose of providing authentication and authorization of the devices attached to LAN ports. It allows access to the LAN port to devices that are configured for access, and prevents access to the LAN port to devices that are not correctly configured.
The specification recommends the adoption of IEEE 802.1X for port based authentication for wireless networks. It defines a set of commands to configure and manage a device's IEEE 802.1X configurations, both for wireless and hardwired network interfaces. It assumes that IEEE 802.1X configuration and reconfiguration is performed outside of the IEEE 802.1X-secured network.

3. Changes

Find below all errata from Version 2.6.1 to 16.03 in order to improve interoperability. The numbers correspond to the Change Request ticket numbers and are not necessarily continuously ascending.

If not noted otherwise the changes refer to the Core specification.

1767 Replace GuaranteedInstances property by method

in ONVIF Media2 Service Specification and related schema
remove property GuaranteedInstances from VideoEncoder2ConfigurationOptions.

Add method GetVideoEncoderInstances to specification and wsdl.

1781 Ccorrect annotation for tt:Vector1D

replace documentations for *<xs:complexType name="Vector1D">* in onvif.xsd

```
<xs:complexType name="Vector1D">
 <xs:attribute name="x" type="xs:float" use="required"/>
 <xs:attribute name="space" type="xs:anyURI" use="optional">
  <xs:annotation>
   <xs:documentation>
    Pan/tilt coordinate space selector. The following options are defined:<ul style="">
    <li> http://www.onvif.org/ver10/tptz/PanTiltSpaces/PositionGenericSpace</li>
    <li> http://www.onvif.org/ver10/tptz/PanTiltSpaces/TranslationGenericSpace</li>
    <li> http://www.onvif.org/ver10/tptz/PanTiltSpaces/VelocityGenericSpace</li>
    <li> http://www.onvif.org/ver10/tptz/PanTiltSpaces/GenericSpeedSpace</li>
    </ul>
   </xs:documentation>
  </xs:annotation>
 </xs:attribute>
</xs:complexType>
```
With
```
<xs:complexType name="Vector1D">
 <xs:attribute name="x" type="xs:float" use="required"/>
 <xs:attribute name="space" type="xs:anyURI" use="optional">
  <xs:annotation>
   <xs:documentation>
```

Zoom coordinate space selector. The following options are defined:<ul style="">
 http://www.onvif.org/ver10/tptz/ZoomSpaces/PositionGenericSpace
 http://www.onvif.org/ver10/tptz/ZoomSpaces/TranslationGenericSpace
 http://www.onvif.org/ver10/tptz/ZoomSpaces/VelocityGenericSpace
 http://www.onvif.org/ver10/tptz/ZoomSpaces/ZoomGenericSpeedSpace

</xs:documentation>
</xs:annotation>
</xs:attribute>
</xs:complexType>

1787 Annotate TCP enum definition of tt:TransportProtocol

Insert an annotation for supporting protocol RTP/TCP was deprecated, into "*TransportProtocol*" type in onvif.xsd. Replace the type description

```
<xs:simpleType name="TransportProtocol">
 <xs:restriction base="xs:string">
  <xs:enumeration value="UDP"/>
  <xs:enumeration value="TCP"/>
  <xs:enumeration value="RTSP"/>
  <xs:enumeration value="HTTP"/>
 </xs:restriction>
</xs:simpleType>
```
With
```
<xs:simpleType name="TransportProtocol">
 <xs:restriction base="xs:string">
  <xs:enumeration value="UDP"/>
  <xs:enumeration value="TCP"/>
   <xs:annotation>
    <xs:documentation>This value is deprecated.</xs:documentation>
   </xs:annotation>
  <xs:enumeration value="RTSP"/>
  <xs:enumeration value="HTTP"/>
 </xs:restriction>
</xs:simpleType>
```

1789 Fix typo in onvif.xsd comments

Replace the comment for ONVIF schema and service respective WSDLs

<!-- first Vendor than ONVIF -->

With

<!-- first Vendor then ONVIF -->

And also replace

<!-- first ONVIF than Vendor -->

With

<!-- first ONVIF then Vendor -->

There are 183 changes in onvif.xsd, 30 changes in deviceio.wsdl, 5 changes in ver20/media/wsdl/media.wsdl, 1 change in imaging.wsdl, and 1change in ptz.wsdl.

1790 Clarify ConfigurationsSupported documentation

Insert a phrase into documentation of *<xs:attribute name="ConfigurationsSupported" type="tt:StringAttrList">* for *<xs:complexType name="ProfileCapabilities">* in ver20/media/wsdl/media.wsdl

As replace

```
    <xs:attribute name="ConfigurationsSupported" type="tt:StringAttrList">
     <xs:annotation>
      <xs:documentation>Enumerates the configurations supported by the
    device.</xs:documentation>
     </xs:annotation>
    </xs:attribute>
```

With

```
    <xs:attribute name="ConfigurationsSupported" type="tt:StringAttrList">
     <xs:annotation>
      <xs:documentation>Enumerates the configurations supported by the device as defined by
    tr2:ConfigurationEnumeration.</xs:documentation>
     </xs:annotation>
    </xs:attribute>
```

1791 Add tt:ProfileStatus and tt:ActiveConnection to onvif.xsd

Insert Media event types as below into onvif.xsd.

```
<!--=========================================-->
<!-- Begin, Media event types          -->
<!--=========================================-->
<xs:complexType name="ActiveConnection">
 <xs:sequence>
  <xs:element name="CurrentBitrate" type="xs:float"/>
  <xs:element name="CurrentFps" type="xs:float"/>
  <xs:any namespace="##any" processContents="lax" minOccurs="0"
maxOccurs="unbounded"/>   <!-- first Vendor then ONVIF -->
 </xs:sequence>
 <xs:anyAttribute processContents="lax"/>
</xs:complexType>
<!--=============================-->
<xs:complexType name="ProfileStatus">
 <xs:sequence>
  <xs:element name="ActiveConnections" type="tt:ActiveConnection" minOccurs="0"
maxOccurs="unbounded"/>
  <xs:element name="Extension" type="tt:ProfileStatusExtension" minOccurs="0" />
 </xs:sequence>
</xs:complexType>
<!--=============================-->
<xs:complexType name="ProfileStatusExtension">
 <xs:sequence>
  <xs:any namespace="##any" processContents="lax" minOccurs="0"
maxOccurs="unbounded"/>   <!-- first Vendor then ONVIF -->
 </xs:sequence>
 <xs:anyAttribute processContents="lax"/>
</xs:complexType>
<!--=========================================-->
<!-- End, Media event types          -->
<!--=========================================-->
```

1792 MediaService 2.0 : GetOSDs response must return a list

In ver20/media/wsdl/media.wsdl, element <xs:element name="GetOSDsResponse">,

Replace

      <xs:element name="OSD" type="tt:OSDConfiguration">

With

      <xs:element name="OSDs" type="tt:OSDConfiguration" minOccurs="0"
      maxOccurs="unbounded">

Replace

      <xs:documentation>The requested OSD configuration.</xs:documentation>

With

      <xs:documentation>This element contains a list of requested OSDs.</xs:documentation>

1793 VideoEncoder*ConfigurationOptions QualityRange type

Change the type of *QualityRange* element for *<xs:complexType name="VideoEncoderConfigurationOptions">* and *<xs:complexType name="VideoEncoder2ConfigurationOptions">*

As replace

      <xs:element name="QualityRange" type="tt:IntRange">

With

      <xs:element name="QualityRange" type="tt:FloatRange">

1797 Add processContext to IntemList->ElementItem (onvif.xsd)

Replace the definition of extension for ItemList->ElementItem in onvif.xsd

```
<xs:sequence>
 <xs:any namespace="##any">
  <xs:annotation>
   <xs:documentation>XML tree contiaing the element value as defined in the corresponding
description.</xs:documentation>
  </xs:annotation>
 </xs:any>
</xs:sequence>
```

With

```
<xs:sequence>
 <xs:any namespace="##any" processContents="lax" minOccurs="0" maxOccurs="unbounded">
<!-- first Vendor then ONVIF -->
  <xs:annotation>
   <xs:documentation>XML tree contiaing the element value as defined in the corresponding
description.</xs:documentation>
  </xs:annotation>
 </xs:any>
</xs:sequence>
```

1800 MediaService2.0: VideoRateControl2: Schema and Specification NOT matching

Replace a parameter name of VideoRateControl2 at Section 5.12.16 in Media2 Service Specification

TargetFrameRate

With

FrameRateLimit

And also replace in the schema example

```
<xs:element name="TargetFrameRate" type="xs:float"/>
```

With

```
<xs:element name="FrameRateLimit" type="xs:float"/>
```