

ONVIF Interface Guide Specification

Version 1.0.1

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Revision History

Ver.	Date	Description	Contributors
1.0.1	2013-10-11	Updated template to include stylesheet reference	<ul style="list-style-type: none"> • Matt Powers, Anixter • Ulf Svensson, Axis Communications • Johan Svensk, Axis Communications • Gregor Wegrzynek, Bosch Security Systems • Markus Wierny, Bosch Security Systems • Neelendra Bhandari, Honeywell • Ramesh Subbaiah, Honeywell • Scott Hudson (Ed.), Pelco by Schneider Electric • Joseph Moeller, Pelco by Schneider Electric • Andreas Schneider, Sony Corporation • Masashi Tonomura, Sony Corporation
1.0	2013-09-19	Initial requirements	<ul style="list-style-type: none"> • Matt Powers, Anixter • Ulf Svensson, Axis Communications • Johan Svensk, Axis Communications • Gregor Wegrzynek, Bosch Security Systems • Markus Wierny, Bosch Security Systems • Neelendra Bhandari, Honeywell • Ramesh Subbaiah, Honeywell • Scott Hudson (Ed.), Pelco by Schneider Electric • Joseph Moeller, Pelco by Schneider Electric • Andreas Schneider, Sony Corporation • Masashi Tonomura, Sony Corporation

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1 Scope

This specification defines and describes the ONVIF Interface Guide, which must accompany any DoC submission to the ONVIF office as part of the ONVIF Conformance Process. The conformity assessment is the “activity concerned with determining directly or indirectly that relevant requirements are fulfilled,” as stated in the ISO/IEC Guide 2: Standardization and Related Activities: General Vocabulary [ISO/IEC G2].

2 IMPORTANT

As of September 30, 2013 ONVIF Members shall provide an ONVIF Interface Guide as part of the [ONVIF Conformance Process].

Before January 1, 2014, as a grace period, it is still possible to claim conformance to previous versions of ONVIF Conformance Process version 2.0.

In order to provide an automated checking mechanism by the ONVIF office, the ONVIF Interface Guide shall be provided in XML format, conforming to the DocBook v5.x standard and using the provided template.

3 Normative references

- [ONVIF RoM] ONVIF, “Rules of Membership”
URL: <http://www.onvif.org/>
- [ONVIF Conformance Process] ONVIF Conformance Process Specification
URL: <http://www.onvif.org/>
- [DocBook-v5.x] The OASIS DocBook Schema Version 5.x.
URL: https://www.oasis-open.org/committees/tc_home.php?wg_abbrev=docbook
Specification: <http://docs.oasis-open.org/docbook/specs/>

4 Informative References

- [ONVIF Profile Specs] All ONVIF Profiles Specifications documents
URL: <http://www.onvif.org/>
- [ONVIF Specification Set] All ONVIF Network Interface Specification Set documents
URL: <http://www.onvif.org/>
- [ONVIF Test Spec] ONVIF, “Test Specification”
URL: <http://www.onvif.org/>
- [ONVIF Test Tool] ONVIF, “Test Tool”
URL: <http://www.onvif.org/> (Developers’ Forum only)
- [ONVIF Logo] ONVIF, “Logo Guidelines”
URL: <http://www.onvif.org/> (Developers’ Forum only)
- [ONVIF Profile Policy] Profile Policy
URL: <http://www.onvif.org/>
- [ISO IEC Directives] Part 2 “Rules for the structure and drafting of International Standards, Annex H: Verbal forms for the expression of provisions
- [ISO/IEC G2] ISO/IEC, “Guide 2: Standardization and Related Activities: General Vocabulary”.

[ISO/IEC CS] ISO/IEC 17050, “Conformity assessment – Supplier’s declaration of conformity – Part 1: General requirements”.

[ONVIF Schema] ONVIF, “Schema”
URL: <http://www.onvif.org/>

5 Terms and Definitions

5.1 Conventions

The key words “shall”, “shall not”, “should”, “should not”, “may”, “need not”, “can”, “cannot” in this specification are to be interpreted as described in [ISO IEC Directives].

5.2 Definitions

Member	Organization participating in good standing in the Full, Contributing, or User Membership level in ONVIF.
ONVIF Device	Networked appliance or software program that exposes one or multiple ONVIF Web Services.
ONVIF Client	Networked appliance or software program that uses ONVIF Webservices. .
Profiles	A specific and unambiguous set of features that an ONVIF Device or ONVIF Client shall implement or use to claim conformance to, as defined in the Profile Specification for that specific Profile.
Product Name	The basic product identifier including the product name and model.
Version Number	The release number for firmware version or client software version.

6 Purpose of the ONVIF Interface Guide

The purpose of the ONVIF Interface Guide is to provide the initial steps required to operate an ONVIF client or device using the ONVIF API. Intended audience for the Interface Guides are installers, system integrators, architects and engineers, end users.

The Member should make the ONVIF Interface Guide available on its website or as part of the product documentation materials. ONVIF shall make the Interface Guides provided by the members available as part of the product information on the ONVIF conformant product homepage.

The ONVIF Interface Guide shall be provided by the indicated Member which is solely responsible for declared conformance and the information in the guide. Conformity is valid ONLY for the ONVIF product identified when used in a manner consistent with the intent of the referenced documents.

7 Requirement Levels

Each feature in this document has a requirement level for Device and Client that shall be provided in the ONVIF Interface Guide document.

The requirement levels are:

- Mandatory = Documentation shall be provided for a device or client in the ONVIF Interface Guide.
- Optional = Documentation of a feature or function may be provided for a device or client in the ONVIF Interface Guide.
- Conditional = Documentation of a feature or function or requirement shall be provided if applicable for devices and clients in the ONVIF Interface Guide.

Function Lists use the following abbreviations:

- M = Mandatory
- O = Optional
- C = Conditional

8 Mandatory Sections

The ONVIF Interface Guide shall provide the following sections. Any differences between product models or product family within the scope of an ONVIF Interface Guide shall be indicated in the respective sections of the ONVIF Interface Guide.

8.1 Overview

- [M] Standard template text:
The purpose of this guide is to provide the initial steps required to operate this product using the ONVIF API. For more information on ONVIF, refer to <http://www.onvif.org>.

This ONVIF Interface Guide is issued by the indicated Member which is solely responsible for declared conformance and the information in this guide. Conformity is valid ONLY for the ONVIF product identified when used in a manner consistent with the intent of the referenced documents.

8.1.1 Product Information

- [O] Company Logo
- [M] Product Name and Version Number. This section shall list the matching Product Name and Version Number as identified in the DoC.

8.1.1.1 Supported ONVIF Profiles

- [M] List of supported ONVIF Profiles

8.1.2 Support Information

- [M] Technical Support contact information including:
 - [M] General international support mailing address
 - [O] Regional support contact address
 - [M] Technical support website URL
 - [O] Technical support email
 - [O] Technical support phone

8.2 Prerequisites

- [C] Hardware or software required to interact with each of the ONVIF clients or devices, including:
 - Hardware and operating system
 - Internet browser or Test Tool
 - Network connection to the client/device
 - Knowledge of IP infrastructure / network environment

8.3 Installation

- [M] Instructions for how to install the product as applicable, including:
 - Power Source
 - Network Connection
 - Wiring
 - Software installation

8.4 Default Network Settings

- [Device:M, Client:C] Instructions on how to obtain the IP Address for the ONVIF clients or devices, including:
 - Default IP Address
 - DHCP

8.5 Default Login

- [Device:M, Client:C] Instructions for how to log on to the ONVIF clients or devices, including:
 - Default Username and Password
 - Default Access URL

8.6 Local Configuration

- [M] Instructions for how to navigate to the settings or configuration page to modify the general settings, network settings, set up users, configure events, or other key functionality.
 - [M] Where to find (path, menus, settings, etc.)
 - [C] On-board configuration

8.7 Enabling ONVIF

- [M] Information on whether the ONVIF interface is enabled by default or not.
- [C] Instructions for how to enable the ONVIF interface, if it is not enabled by default.

8.8 Querying Capabilities

- [Client:M] Instructions for how to query the capabilities of an ONVIF device from an ONVIF client.
 - Discovery
 - how to add a device
 - Get Capabilities
 - Querying GetCapabilities or Get Services

9 Optional Sections

The ONVIF Interface Guide may provide the following sections:

9.1 Remote Configuration

- [O] Instructions for how to remotely configure the device using the client, including:
 - Configure a media stream
 - Configure a recording
 - Configure an access point

10 XML Template

The XML document template shall use the DocBook v5.x standard. The template shall be available on the ONVIF Member Forum in the Conformance Process area (Member Information > Documents & Specifications > Conformance Process).

The content of the XML template shall contain the following:

```
<?xml version="1.0" encoding="UTF-8"?>
<?xml-model href="http://docbook.org/xml/5.0/rng/docbook.rng"
schematypens="http://relaxng.org/ns/structure/1.0"?>
<?xml-model href="http://docbook.org/xml/5.0/rng/docbook.rng"
type="application/xml"
schematypens="http://purl.oclc.org/dsdl/schematron"?>
<?xml-model href="check_onvif_interface_guide.sch"
type="application/xml"
schematypens="http://purl.oclc.org/dsdl/schematron"?>
<?xml-stylesheet href="docbook-css/docbook.xsl" type="text/xsl" ?>

<article xmlns="http://docbook.org/ns/docbook"
xmlns:xlink="http://www.w3.org/1999/xlink"
xmlns:xhtml="http://www.w3.org/1999/xhtml"
version="5.0" audience="installer/integrator"
xml:id="company_model">
  <info>
    <title>ONVIF Interface Guide</title>
    <!-- Add your company and product information in the subtitle.
-->
    <subtitle>For <orgname>company</orgname>
      <productname class="registered">brand</productname>
      <productnumber>model</productnumber></subtitle>
    <copyright>
      <year>2013</year>
    </copyright>
    <cover>
      <!-- Do NOT change ONVIF information. -->
      <para><org>
        <orgname>
          <inlinemediaobject>
            <imageobject>
              <imagedata
fileref="ONVIF_Color_A_1.png" format="PNG"/>
            </imageobject>
            <textobject>
              <phrase>ONVIF Inc.</phrase>
            </textobject>
          </inlinemediaobject>
        </orgname>
        <address>
          <street>2400 Camino Ramon</street>
          <otheraddr>Suite 375</otheraddr>
          <city>San Ramon</city>, <state>CA</state>
          <postcode>94583</postcode>
          <country>USA</country>
          <phone>+1.925.275.6621</phone>
          <fax>+1.925.275.6691</fax>
          <email>info@onvif.org</email>
          <uri
xlink:href="http://www.onvif.org">http://www.onvif.org</uri>
        </address>
      </org></para>
```

```
</cover>
</info>
<section xml:id="overview">
  <!-- Do NOT change Overview text! -->
  <title>Overview</title>
  <para>The purpose of this guide is to provide the initial
steps required to operate this
      product using the ONVIF API. For more information on ONVIF,
refer to <uri
xlink:href="http://www.onvif.org">http://www.onvif.org</uri>
  </para>
  <para>This ONVIF Interface Guide is issued by the indicated
Member which is solely
      responsible for declared conformance and the information
in this guide. Conformity is
      valid ONLY for the ONVIF product identified when used in a
manner consistent with the
      intent of the referenced documents.</para>
  <section xml:id="product_info">
    <!-- Add your company logo and product information in this
section. -->
    <title>Product Information</title>
    <para><orgname>
      <inlinemediaobject>
        <imageobject>
          <imagedata fileref="company_logo.png"
format="PNG"/>
        </imageobject>
        <textobject>
          <phrase>company</phrase>
        </textobject>
      </inlinemediaobject>
    </orgname></para>
    <itemizedlist>
      <listitem>
        <para><productname
class="registered">brand</productname>
          <productnumber>model</productnumber>
        </para>
      </listitem>
    </itemizedlist>
    <section xml:id="supported_profiles">
      <!-- Update supported profiles information here.
Remove or comment out profiles that are not supported. -->
      <title>Supported ONVIF Profiles</title>
      <itemizedlist>
        <listitem>
          <mediaobject>
            <imageobject>
              <imagedata
fileref="ONVIF_Icons_S_cmyk.png" format="PNG"/>
            </imageobject>
            <textobject>
              <phrase>ONVIF Profile S</phrase>
            </textobject>
          </mediaobject>
        </listitem>
        <listitem>
          <mediaobject>
```

```

        <imageobject>
            <imagedata
fileref="ONVIF_Icons_G_cmyk.png" format="PNG"/>
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            <textobject>
                <phrase>ONVIF Profile G</phrase>
            </textobject>
        </mediaobject>
    </listitem>
    <listitem>
        <mediaobject>
            <imageobject>
                <imagedata
fileref="ONVIF_Icons_C_cmyk.png" format="PNG"/>
                </imageobject>
                <textobject>
                    <phrase>ONVIF Profile C</phrase>
                </textobject>
            </mediaobject>
        </listitem>
    </itemizedlist>
</section>
</section>
<section xml:id="support_info">
    <title>Support Information</title>
    <para>
        <org>
            <orgname>company</orgname>
            <address>
                <street>street</street>
                <city>city</city>, <state>state</state>
                <postcode>postalcode</postcode>
                <country>country</country>
                <phone>phone</phone>
                <email>support email</email>
                <uri xlink:href="url">url</uri>
            </address>
        </org>
    </para>
</section>
</section>
<section xml:id="prereqs">
    <title>Prerequisites</title>
    <!--
        Hardware and Operating System
        Internet browser or Test Tool
        Network connection to the client/device
        Knowledge of IP infrastructure / network environment
        Specify "Not Applicable" if not needed
    -->
</section>
<section xml:id="installation">
    <title>Installation</title>
    <!-- Installation instructions -->
</section>
<section xml:id="network">
    <title>Default Network Settings</title>
    <!-- IP Address Settings (DHCP or default address location).

```

```
Specify "Not Applicable" if not needed. -->

</section>
<section xml:id="login">
  <title>Default Login</title>
  <!-- How to login to the device or client. Default username /
password. Specify "Not Applicable" if not needed.-->

</section>
<section xml:id="config">
  <title>Local Configuration</title>
  <!--
    Where to find (path, menus, settings, etc.)
    How to enable ONVIF interface
    On-board configuration
  -->

</section>
<section xml:id="enable_onvif">
  <title>Enabling ONVIF</title>
  <!-- How to enable ONVIF if it is not enabled by default.
-->

</section>
<!--
  <section xml:id="get_capabilities">
    <title>Determining Capabilities of an ONVIF Device</title>
    <para>To determine the supported capabilities of the
camera, the ONVIF Client should
      call <methodname>GetCapabilities</methodname>.</para>
  </section>-->
<!--
  <section>
    <title>Remote Configuration (OPTIONAL)</title>
    <!--\
      Configuring the device using the client
      - Configure a media stream
      - Configure a recording
      - Configure an access point
    -\->
  </section>-->
</article>
```

11 Suggested tools and more information

- <http://www.docbook.org/>
- https://www.oasis-open.org/committees/tc_home.php?wg_abbrev=docbook