

# ONVIF<sup>™</sup> Conformance Process Specification

Version 3.1

September 2014



© 2008 - 2014 by ONVIF: Open Network Video Interface Forum, Inc. All rights reserved.

Recipients of this document may copy, distribute, publish, or display this document so long as this copyright notice, license and disclaimer are retained with all copies of the document. No license is granted to modify this document.

THIS DOCUMENT IS PROVIDED "AS IS," AND THE CORPORATION AND ITS MEMBERS AND THEIR AFFILIATES, MAKE NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT, OR TITLE; THAT THE CONTENTS OF THIS DOCUMENT ARE SUITABLE FOR ANY PURPOSE; OR THAT THE IMPLEMENTATION OF SUCH CONTENTS WILL NOT INFRINGE ANY PATENTS, COPYRIGHTS, TRADEMARKS OR OTHER RIGHTS.

IN NO EVENT WILL THE CORPORATION OR ITS MEMBERS OR THEIR AFFILIATES BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, ARISING OUT OF OR RELATING TO ANY USE OR DISTRIBUTION OF THIS DOCUMENT, WHETHER OR NOT (1) THE CORPORATION, MEMBERS OR THEIR AFFILIATES HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, OR (2) SUCH DAMAGES WERE REASONABLY FORESEEABLE, AND ARISING OUT OF OR RELATING TO ANY USE OR DISTRIBUTION OF THIS DOCUMENT. THE FOREGOING DISCLAIMER AND LIMITATION ON LIABILITY DO NOT APPLY TO, INVALIDATE, OR LIMIT REPRESENTATIONS AND WARRANTIES MADE BY THE MEMBERS AND THEIR RESPECTIVE AFFILIATES TO THE CORPORATION AND OTHER MEMBERS IN CERTAIN WRITTEN POLICIES OF THE CORPORATION.



# **REVISION HISTORY**

Vers.	Date	Description	Contributors
1.0	March 2009	Initial conformance requirements	<ul> <li>Tim Holloway, Anixter</li> <li>Ann-Elise Lady, Axis Communications</li> <li>Ann-Sofie Rase, Axis Communications</li> <li>Baldvin Gislason Bern, Axis Communications</li> <li>Christian Gehrmann, Axis Communications</li> <li>Daniel Elvin (Ed.), Axis Communications</li> <li>Edyta Tomczak, Axis Communications</li> <li>Göran Haraldsson, Axis Communications</li> <li>Hans Olsen, Axis Communications</li> <li>Markus Wierny, Bosch Security Systems</li> <li>Andy Ryu, Samsung</li> <li>Dongseuk Park, Samsung</li> <li>Seungmin Lee, Samsung</li> <li>Younghun Na, Samsung</li> <li>Andreas Schneider, Sony Corporation</li> </ul>
2.0	March 2012	Addition of Profile conformance	<ul> <li>Matt Powers, Anixter</li> <li>Baldvin Gislason Bern, Axis Communications</li> <li>Daniel Elvin, Axis Communications</li> <li>Markus Wierny, Bosch Security Systems</li> <li>Jonathan Doyon (Ed.), Genetec</li> <li>Andreas Schneider, Sony Corporation</li> </ul>
3.0	September 2013	Guide requirement	<ul> <li>Matt Powers, Anixter</li> <li>Ulf Svensson, Axis Communications</li> <li>Johan Svensk, Axis Communications</li> <li>Gregor Wegrzynek, Bosch Security Systems</li> <li>Markus Wierny, Bosch Security Systems</li> <li>Neelendra Bhandari, Honeywell</li> <li>Ramesh Subbaiah, Honeywell</li> <li>Scott Hudson (Ed.), Pelco by Schneider Electric</li> <li>Joseph Moeller, Pelco by Schneider Electric</li> <li>Andreas Schneider, Sony Corporation</li> <li>Masashi Tonomura, Sony Corporation</li> </ul>
3.1	September 2014	Addendum: Temporary Client Conformance in case of less than 3 conformant Devices available.	<ul> <li>Bob Dolan, Anixter</li> <li>Anders Johansson, Axis Communications</li> <li>Johan Svensk, Axis Communications</li> </ul>



Vers.	Date	Description	Contributors
		_	Gregor Wegrzynek, Bosch Security Systems
		disputes (Annex D).	Neelendra Bhandari, Honeywell
			Ramesh Subbaiah , Honeywell
			Scott Hudson, Pelco by Schneider Electric
			Andreas Schneider (Ed.), Sony Corporation
			Marc Suzuki, Sony Corporation



# TABLE OF CONTENTS

1	Intro	ductionduction	7
	1.1	IMPORTANT	7
	1.2	Scope	7
	1.3	Normative References	7
	1.4	Informative References	7
2	Term	s and Definitions	9
	2.1	Conventions	9
	2.2	Definitions	9
	2.3	Abbreviations	9
3	ONV	IF Conformance Fundamentals	10
	3.1	Objectives	10
	3.2	Conformance Process Outline	10
	3.3	Self-declaration	11
	3.4	Requirement Levels	12
	3.5	Set of Specifications	12
	3.6	Relations between Specifications	13
	3.7	Restricted Liability of ONVIF	14
	3.8	Conformance Testing Services	14
	3.9	Conformance Statement	14
4	Decl	aration of Conformance	16
	4.1	Role and Responsibility	16
	4.2	The Declaration of Conformance	16
	4.3	Submission to ONVIF Office	16
	4.4	Different Variations of the same Product	17
	4.5	OEM Products	17
	4.6	Listing by ONVIF	17
	4.7	Conformance Testing	17
	4.8	Updating a Declaration of Conformance	18
	4.9	Compatibility between ONVIF Devices and ONVIF Clients of the same Profile	18
	4.10	Valid Time of the Declaration of Conformance	18
	4.11	Withdrawal of Declaration of Conformance	18



5	Con	formance Requirements for ONVIF Devices	20
	5.1	Conformance Requirements for ONVIF Devices	20
	5.2	Interpretation (Informative)	21
6	Con	formance Requirements for ONVIF Clients	22
	6.1	Conformance Requirements for ONVIF Clients	22
	6.2	Requirements for Temporary Conformance Declaration for ONVIF Clients	23
7	Plug	-fest (Informative)	24
Anne	x A C	eclaration of Conformance – ONVIF Client	25
Anne	x B T	EMPORARY Declaration of Conformance – ONVIF Client	27
Anne	x C C	Communication Address of ONVIF Office (Informative)	29
Anne	x D F	landling of Disputes (Informative)	30
	D.1	Handling of Interoperability Related Claims	30
	D.2	Handling of Improper Claims of Conformance	30



#### 1 Introduction

This document defines and describes the Conformance Process of the ONVIF organization. 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].

#### 1.1 IMPORTANT

This ONVIF Conformance Process document v3.1 replaces the previously released version 3.0. As of September 30, 2014 ONVIF Members shall only declare conformance to one or multiple profiles and shall fulfil all the conditions listed in this document, the ONVIF Conformance Process v3.1.

# 1.2 Scope

This Conformance Process Specification of the ONVIF Interface defines the requirements for claiming conformance with the ONVIF specifications. It covers both conformance requirements for ONVIF Devices and ONVIF Clients.

#### 1.3 Normative References

[ONVIF Profile Specs] All ONVIF Profiles Specifications documents

URL: http://www.onvif.org/

[ONVIF Interface Spec] All ONVIF Network Interface Specification Set documents and

corresponding WSDL and Schema specifications

URL: <a href="http://www.onvif.org/">http://www.onvif.org/</a>

[ONVIF Interface Guide Specification document

URL: <a href="http://www.onvif.org/">http://www.onvif.org/</a>

[ONVIF Brand ID] ONVIF Brand Identity Overview

URL: <a href="http://www.onvif.org/">http://www.onvif.org/</a> (Developers' Forum only)

[ONVIF RoM] ONVIF Rules of Membership

URL: http://www.onvif.org/

[ONVIF Test Spec] All ONVIF Test Specification documents

URL: <a href="http://www.onvif.org/">http://www.onvif.org/</a>

[ONVIF Device Test Tool] ONVIF Device Test Tool

URL: <a href="http://www.onvif.org/">http://www.onvif.org/</a> (Developers' Forum only)

#### 1.4 Informative References

[ONVIF Profile Policy] ONVIF Profile Policy

URL: <a href="http://www.onvif.org/">http://www.onvif.org/</a>

ONVIF Confidential - see restrictions on first page



[ONVIF WG Platform] ONVIF Working Group Platform

URL: https://wush.net/trac/onvif/wiki/WikiStart

[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"

[ISO/IEC Directives] ISO/IEC Directives Part 2 "Rules for the structure and drafting of

International Standards, Annex H: Verbal forms for the

expression of provisions"

[ONVIF Schema] ONVIF, "Schema"

URL: www.onvif.org



#### 2 Terms and Definitions

#### 2.1 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].

#### 2.2 Definitions

Member organization participating in good standing in the Full,

Contributing, or User Membership level in ONVIF

ONVIF Client networked appliance or software program that uses ONVIF Web

services

ONVIF Device networked appliance or software program that exposes one or

multiple ONVIF Web services

ONVIF Profile specific and unambiguous set of features implemented by an

ONVIF Device or ONVIF Client to ease interoperability

NOTE: An ONVIF Profile is defined by a respective ONVIF Profile Specification, the reference document to claim conformance to that profile.

product name basic product identifier including the product name and model version number release number for firmware version or Client software version

#### 2.3 Abbreviations

DoC Declaration of Conformance

WSDL Web Services Description Language



#### 3 ONVIF Conformance Fundamentals

# 3.1 Objectives

The objectives of the ONVIF Conformance Process are the following:

- Ensure a common understanding of conformance and what is required to claim ONVIF conformance.
- Promote interoperability between ONVIF conforming Devices and Clients.
- Define common procedures and requirements for all forum Members towards self-declaration of conformance of relevant product(s) with certain ONVIF Profiles and for the resulting possibility to communicate this with the use of the ONVIF Logo.

#### 3.2 Conformance Process Outline

The ONVIF conformance process is a self-declaration scheme under which the Member may state support of one or multiple ONVIF profile(s) for a given ONVIF Device or ONVIF Client. The declaration of conformity states that the ONVIF Device or ONVIF Client:

- Implements all functionality for the claimed profile(s) as listed in the [ONVIF Profile Specs].
- Respect entirely the specification and methods described in the [ONVIF Interface Spec].
   This includes also optional functionalities not listed as mandatory in the claimed profile(s).
- Positively responds to the test routines of the [ONVIF Test Spec] corresponding to the claimed profile(s).
- Successfully passes the [ONVIF Device Test Tool] for the claimed profile(s).
- Submit the Declaration of Conformance (DoC), ONVIF Interface Guide, and Feature List file to the ONVIF office.

ONVIF conformance means that the requirements stated in the claimed [ONVIF Profile Specs] are fulfilled according to the defined requirement levels. To increase the confidence in the conformance statement, ONVIF also provides [ONVIF Test Spec] and [ONVIF Device Test Tool]. This Conformance Process Specification defines how a Member shall use these components to claim conformance to one or multiple ONVIF Profiles.

The process flow in Fig. 1 outlines the process steps to be followed by members to declare conformance of a product with at least one ONVIF Profile.



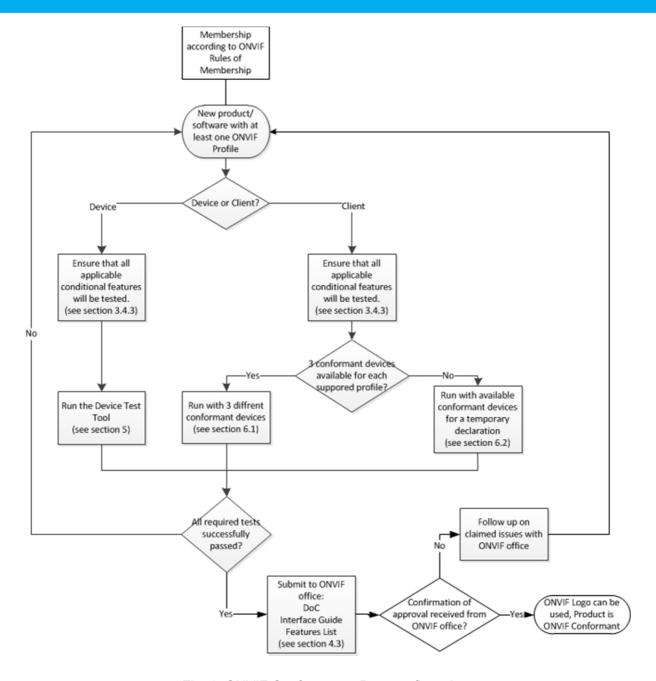


Fig. 1: ONVIF Conformance Process flow chart

#### 3.3 Self-declaration

The ONVIF Conformance Process is a self-declaration process. That is, for a Member to claim conformance to one or multiples profiles the Member shall ensure that all of the requirements of this ONVIF Conformance Process are fulfilled, according to Section 5, *Conformance Requirements for ONVIF Devices*, or Section 6, *Conformance Requirements for ONVIF Clients*, whichever is applicable.

The responsibility for the conformance statement is solely the Member's. See also Section 3.7, *Restricted Liability of ONVIF*.



# 3.4 Requirement Levels

The [ONVIF Profiles Specs] include their list of required functionalities with the different requirement levels as listed below:

- MANDATORY
- CONDITIONAL
- OPTIONAL

The following sections describe the use of these keywords in the ONVIF specifications.

#### 3.4.1 MANDATORY

If a service, feature, or functional block is marked as "mandatory" an ONVIF conforming Device or Client shall unconditionally support this function. **Failure to comply with this is a violation** of the ONVIF Conformance requirement.

#### 3.4.2 CONDITIONAL

Devices and Clients shall implement the "conditional" feature if they support that functionality in any way, including any proprietary way. Features that are conditional are marked with "if supported" in [ONVIF Profile Specs]. **Failure to comply with this is a violation** of the ONVIF Conformance requirement.

EXAMPLE 1 (informative): An ONVIF Device with mechanical pan, tilt and zoom capabilities shall unconditionally support the PTZ service as described in the appropriate [ONVIF Profile Specs].

EXAMPLE 2 (informative): An ONVIF Client with support for PTZ-control using a proprietary protocol shall unconditionally support the PTZ service as described in the appropriate [ONVIF Profile Specs].

#### 3.4.3 OPTIONAL

If a service, feature, or functional block is marked as "optional" an ONVIF conforming Device or Client may support this function. To not support such a function is not a violation of the ONVIF Conformance requirement. If implemented, it shall be implemented as defined in [ONVIF Interface Spec] and successfully pass the tests described in [ONVIF Test Spec] and executed by the [ONVIF Device Test Tool]. Failure to comply with the [ONVIF Interface Spec], [ONVIF Test Spec] and [ONVIF Device Test Tool] when implementing an optional service, feature or functional block, is a violation of the ONVIF Conformance requirement.

# 3.5 Set of Specifications

The following specifications comprise the Set of Specifications referred to in this ONVIF Conformance Process Specification:

• [ONVIF Conformance Process Specification] – This document.



- [ONVIF Interface Guide Spec] The specification defining the ONVIF Interface Guide document.
- [ONVIF Interface Spec] A group of documents defining the core technical specification and its accompanying WSDL and schema specifications.
- [ONVIF Profile Specs] A group of document that defines each profiles and the list of mandatory and conditional requirements.
- [ONVIF Test Spec] A group of documents defining basic test routines and procedures to ensure a subset of [ONVIF Interface Spec] is fulfilled.
- [ONVIF Device Test Tool] The software tool used to test a Device for conformance to a given profile according to the [ONVIF Profile Specs] The test tool produces a Declaration of Conformance document and may also produce a Test Report.

In addition to these specifications and tools, all errata issued for any of these as well as all amendments at the time of referencing the Set of Specifications, shall be regarded as parts of the Set of Specifications.

# 3.6 Relations between Specifications

The Set of Specifications, as defined in Section 3.5, contains separate specifications and tools, each with its independent version numbering. While the [ONVIF Test Spec] and [ONVIF Device Test Tool] are counterparts, they only cover a subset of the [ONVIF Interface Spec]. [ONVIF Test Spec] and [ONVIF Device Test Tool] will not completely cover all services, features, or functional blocks, or all possible fault scenarios. As stated in Section 5, passing the test of [ONVIF Device Test Tool] is a necessary but not sufficient condition to claim conformance with the ONVIF Specifications.

The statements below highlight the relationship between the components of the ONVIF Specifications.

- [ONVIF Interface Spec] is the technical specification to which an ONVIF Device or ONVIF Client shall conform to.
- [ONVIF Profile Specs] defines the list of mandatory, conditional, and optional functionality required to claim conformance to the profile defined in the specification.
- [ONVIF Test Spec] provides the test cases that shall be executed in order to claim conformance for an ONVIF Device.
- [ONVIF Device Test Tool] is a test tool for ONVIF Devices that execute subsets of the test routines specified in [ONVIF Test Spec] and generates a Declaration of Conformance (DoC) document, a Feature List, and a Test Report.
- [ONVIF Interface Guide Spec] provides the mandatory structure and content for a
  document that provides the initial steps required to operate an ONVIF Client or Device
  using the ONVIF API.

As the scopes of the specifications are independent, the documents are developed independently.



# 3.7 Restricted Liability of ONVIF

Each Member is solely responsible to ensure conformance for all ONVIF Devices and ONVIF Clients for which the Member has declared conformance with the ONVIF specifications. The Member shall compile and maintain documentation on procedures and test results for each of those ONVIF Devices and ONVIF Clients. The Member shall provide this documentation upon request to ONVIF or its assigned representative for proof.

The ONVIF organization has no liability for Members who claim conformance for ONVIF Devices and/or ONVIF Clients.

- The ONVIF organization has no liability for manufacturers' self-declaration.
- The ONVIF organization has no liability for performance and/or quality of products stating ONVIF conformance.
- The ONVIF organization has no liability for the actual implementation of the ONVIF specifications.

#### Instead the ONVIF organization:

- Provides and maintains on a best effort basis a Test Tool or alternatively other interoperability test means, for basic testing as defined in the Test Specification;
- Relays product claims from customers to the concerned Member;
- Maintains its right to publish all or selected parts of the information provided in the Declaration of Conformance, the Interface Guide, the Feature List (if applicable) and other documents and/or files submitted in accordance with the conformance statement;
- Maintains its right to request test protocols and related product documentation for conformance verification;
- Maintains its right to withdraw product listings from its database (if this service is provided); and
- Maintains its right to temporarily suspend the Membership or exclude Members failing to follow its statutes according to [ONVIF RoM].

# 3.8 Conformance Testing Services

Neither the ONVIF organization nor its committees provide conformance testing services.

#### 3.9 Conformance Statement

A Member with an ONVIF Device and/or an ONVIF Client that fulfils the conformance requirements as stated in Section 5 or Section 6, whichever is applicable, may use the ONVIF Logo according to [ONVIF Brand ID]. The ONVIF Logo shall not be changed or modified, as regulated in [ONVIF Brand ID].

A Member may claim an ONVIF Device and/or an ONVIF Client that fulfils these conformance requirements conforms to the ONVIF Specification but shall then also provide additional



information to what version of [ONVIF Interface Spec] it conforms to. Failure to comply with this is a violation of the ONVIF Conformance requirement.



#### 4 Declaration of Conformance

ONVIF Devices and ONVIF Clients shall conform to the requirements stated in either Section 5, Conformance Requirements for ONVIF Devices, or Section 6, Conformance Requirements for ONVIF Clients, whichever is applicable.

# 4.1 Role and Responsibility

As the conformance process is a self-declaration process, each Member is solely responsible for securing conformance according to the procedures stated herein.

#### 4.2 The Declaration of Conformance

To state conformance with [ONVIF Profile Specs] and related [ONVIF Interface Spec] the Member shall provide the Declaration of Conformance (DoC) document as generated by the ONVIF Device Test Tool for ONVIF Devices or according to the form in Annex A or Annex B respectively for ONVIF Clients. The Member shall also provide an accompanying ONVIF Interface Guide according to the [ONVIF Interface Guide Spec].

Failure to comply with this is a violation of the ONVIF Conformance requirement.

#### 4.3 Submission to ONVIF Office

A Member shall submit the following documents as per Annex C:

- Signed Declaration of Conformance (DoC) in PDF format
- ONVIF Interface Guide in XML format
- Feature List in XML format (for ONVIF Devices only)

The Declaration of Conformance (DoC) shall be signed by an authorized representative of the Member. The Declaration of Conformance can only reference released [ONVIF Profile Specs].

The ONVIF Interface Guide shall be checked for completeness by the ONVIF office.

For ONVIF Devices, following the successful completion of mandatory testing with the [ONVIF Device Test Tool], the DoC is generated automatically in PDF format together with the XML Feature List. The XML Features List shall also be submitted to the ONVIF Office.

The ONVIF Office shall send a confirmation of approval of the DoC and ONVIF Interface Guide back to the issuing Member.

The Member shall not publicly claim ONVIF conformance for the concerned product(s) until the confirmation of approval has been received from the ONVIF office.

This process is based on exchanging electronic files; the DoC shall be printed and signed or digitally signed.



#### 4.4 Different Variations of the same Product

A Member can submit a single DoC and ONVIF Interface Guide for a group of products.

A group of products shall meet the following criteria:

- The product name and version number used shall explicitly demonstrate that these products are related and part of a single family of products.
- All products in the group shall use exactly the same firmware.
- All products in the group shall expose the same functionalities to the end user.
- All products in the group shall be commercialized under the same brand.

The DoC and ONVIF Interface Guide shall include the product name and version number. For a product group, an " \* " wildcard may be used in the product name for product variations that do not affect ONVIF functionality.

#### 4.5 OEM Products

Any Member reselling an ONVIF conform product under a different brand or product name shall complete all the requirements of the conformance process as if it was a totally independent product.

The Member shall not reference to another Declaration of Conformance (DoC) to the ONVIF Office

# 4.6 Listing by ONVIF

ONVIF will provide the service of listing ONVIF conform ONVIF Devices and ONVIF Clients on the ONVIF web <a href="http://www.onvif.org/">http://www.onvif.org/</a>. The listing will be based on the information submitted in the Declaration of Conformance and the Feature List. The details for this process are, however, outside the scope of this specification. See the ONVIF website <a href="http://www.onvif.org/">http://www.onvif.org/</a> for details.

ONVIF may limit the period of time during which a Device or Client is listed on the ONVIF website. ONVIF may exclude products from the list that are being reported as non-conforming as per Annex D. In the latter case, the Member is informed.

# 4.7 Conformance Testing

Each ONVIF product shall execute the tests for conformance to one or multiple ONVIF profiles as described in the [ONVIF Profile Specs] documents and the implementation shall conform to the ONVIF [ONVIF Interface Spec] versions at the time of the test.

At the time of the conformance testing, the Set of Specifications, as defined in Section 3.5, shall incorporate all issued errata and amendments, as well as all updates to all of the entities of the Set of Specifications that relates to the specific [ONVIF Interface Spec] version. Conformance shall be tested for at least one of the supported [ONVIF Interface Spec] versions and should be tested for



the latest version available. See the ONVIF website <a href="http://www.onvif.org/">http://www.onvif.org/</a> for a list of currently supported specifications.

A Member shall execute a complete conformance test, using a currently valid ONVIF test tool, and shall successfully verify conformance to the ONVIF specifications for

- a) any hardware changes affecting ONVIF functionality of a previously approved product,
- b) any generally available software release for a previously approved product.

# 4.8 Updating a Declaration of Conformance

Members are encouraged to submit a new set of conformance documents to the ONVIF Office, as defined in Section 4.3, for any updated ONVIF conformant product. For each product conformant with ONVIF Profiles only one Declaration of Conformity covering all relevant ONVIF Profiles shall be listed. In case the range of profiles to which a product conforms is changed, a new DoC considering actual conditions shall be submitted and replace the previously issued one.

# 4.9 Compatibility between ONVIF Devices and ONVIF Clients of the same Profile

An ONVIF profile is an invariant subset of technical and test specifications, such that the requirements and functionalities of a profile will never change over time. A new release of an [ONVIF Interface Spec] will not impact the existing profiles; hence the latest [ONVIF Interface Spec] document shall always be used for new implementations.

This means that an ONVIF Device with a specific profile can interoperate with an ONVIF Client that supports the same profile. Both systems will successfully communicate together regardless of the specification version used to implement these products.

#### 4.10 Valid Time of the Declaration of Conformance

The Declaration of Conformance (DoC) has no expiration. The DoC is consequently valid indefinitely for the ONVIF Device or ONVIF Client it concerns.

As for the exceptional case described in clause 6.2, ONVIF Members may submit a temporary DoC (Annex B) of a Client conforming to a certain Profile. This temporary DoC is valid only for one year.

#### 4.11 Withdrawal of Declaration of Conformance

In the event an ONVIF Device and/or ONVIF Client no longer meets ONVIF conformance requirements, the Member shall immediately inform the ONVIF Office and withdraw the Declaration of Conformance.

The ONVIF organization has the right to request reasonable material proving the conformance



requirements, from the Member. Failure to provide this may result in a withdrawal of the ONVIF Conformance statement, and thus the right to claim the ONVIF Device and/or ONVIF Client is ONVIF conformant.



# 5 Conformance Requirements for ONVIF Devices

The conformance requirements specific to each ONVIF Profile are defined in [ONVIF Profiles] and a Device may simultaneously implement more than one ONVIF Profile. In that case the Member shall prove conformance for the Device for each supported profile.

# 5.1 Conformance Requirements for ONVIF Devices

This section defines the requirements of the conformance process for ONVIF Devices. Conformance shall be validated for any of the ONVIF supported versions of [ONVIF Interface Spec], see Section 3.5, including all published errata and amendments related to the specification version at the time of testing. The versions of the specifications included in the Set of Specifications are an essential part of the conformance statement.

To claim conformance with the ONVIF Specification and at least one ONVIF Profile, the manufacturer of the ONVIF Device shall ensure all of the following requirements are fulfilled.

- a) Membership shall be fulfilled according to the [ONVIF RoM].
- b) The ONVIF Device shall claim conformance with at least ONE (1) ONVIF profile.
- c) The ONVIF Device shall support all of mandatory services, features, and functional blocks of the claimed profile(s) as listed in [ONVIF Profiles Specs] and defined in [ONVIF Interface Spec].
- d) The ONVIF Device shall support all applicable conditional services, features, and functional blocks of the claimed profile(s) as listed in [ONVIF Profiles Specs] and defined in [ONVIF Interface Spec].
- e) All non-mandatory or non-conditional services, features, and functional blocks supported by the ONVIF Device shall be properly implemented according to [ONVIF Interface Spec].
- f) The ONVIF Device shall successfully pass all the tests identified for the claimed profile(s) as defined in [ONVIF Test Spec] and [ONVIF Profile Spec]. If any of the test cases has been invalidated by a more recent errata or amendment to the [ONVIF Interface Spec] or [ONVIF Test Spec], the Member shall explicitly state which test case has failed and reference the errata or amendment invalidating this test case. This statement shall then accompany the submitted DoC and XML Feature List.
- g) The ONVIF Device shall pass the corresponding test suite for the claimed profile(s) as executed by [ONVIF Device Test Tool]. The Test tool will produce a Declaration of Conformance (DoC) in PDF format and a Feature List in XML format if all the tests successfully pass.
- h) An ONVIF Interface Guide document shall be provided to the ONVIF office describing the initial steps required for operation of an ONVIF Device using the ONVIF API according to [ONVIF Interface Guide Spec]. The document shall be successfully validated against the approved DocBook XML schemas and schematron rules, as specified in the [ONVIF Interface Guide Spec].



# 5.2 Interpretation (Informative)

Successful testing using [ONVIF Device Test Tool] is necessary but not sufficient for claiming ONVIF Conformance. The Member is solely responsible for ensuring proper implementation of [ONVIF Interface Spec] in accordance with the [ONVIF Profile Specs]. The [ONVIF Test Spec] and the accompanying [ONVIF Device Test Tool] are available to assist in the conformance process but do not guarantee complete conformance.



# 6 Conformance Requirements for ONVIF Clients

The conformance requirements specific to each ONVIF Profile are defined in [ONVIF Profiles] and a Client may simultaneously implement more than one ONVIF Profile. In that case the Member shall prove conformance for the Client for each supported profile.

This section describes the requirements of the conformance process for ONVIF Clients. Conformance shall be validated for any of the ONVIF claimed versions of [ONVIF Interface Spec], see Section 3.5, including all the published errata and amendments related to the specification versions at the time of testing. The versions of the specifications included in the Set of Specifications are an essential part of the conformance statement.

# 6.1 Conformance Requirements for ONVIF Clients

To claim conformance with the ONVIF Specification and at least one ONVIF Profile, the manufacturer of the ONVIF Client shall ensure all of the following requirements are fulfilled:

- a) Membership shall be fulfilled according to the [ONVIF RoM].
- b) The ONVIF Client shall claim conformance with at least ONE (1) ONVIF profiles.
- c) The ONVIF Client shall support all of mandatory services, features, and functional blocks of the claimed profile(s) as listed in [ONVIF Profiles Specs] and defined in [ONVIF Interface Spec].
- d) The ONVIF Client shall support all applicable conditional services, features, and functional blocks of the claimed profile(s) as listed in [ONVIF Profiles Specs] and defined in [ONVIF Interface Spec].
- e) All non-mandatory or non-conditional services, features, and functional blocks supported by the ONVIF Client shall be properly implemented according to [ONVIF Interface Spec].
- f) For each supported profile, the ONVIF Client shall correctly operate with THREE (3) ONVIF Conformant Devices supporting the same profile the Client claims conformance to. The THREE ONVIF Devices shall be from THREE (3) different Members.
- g) An ONVIF Interface Guide document shall be provided to the ONVIF office that describes the initial steps required to operate an ONVIF Client using the ONVIF API according to [ONVIF Interface Guide Spec]. The document shall be successfully validated against the approved DocBook XML schemas and schematron rules, as specified in the [ONVIF Interface Guide Spec].

Selection and retrieval of the respective ONVIF Devices from different members is up to and in the responsibility of the member who wants to test its Client for conformance with the ONVIF profile(s).

ONVIF recommends that mandatory features for Clients be tested with as many different Devices having implemented these features as possible.

Annex A shows the form 'Declaration of Conformance – ONVIF Client', a respective template is available to ONVIF members in the ONVIF Developers' Forum.



# 6.2 Requirements for Temporary Conformance Declaration for ONVIF Clients

If fewer than THREE (3) Profile conformant devices from different Members are listed on the ONVIF homepage after six months from the final release of a Profile, an ONVIF member may declare temporary conformance of a Client with this Profile after testing at least ONE Profile-conformant Device using the form in Annex B. In suchcase, the manufacturer of the ONVIF Client shall ensure all of the following requirements are fulfilled:

- a) General requirements as described in 6.1 a) e) and g).
- b) For a newly released Profile for which more than SIX (6) months have passed since final publication and fewer than THREE (3) conformant Devices from different Members are listed on the ONVIF homepage, the Member may declare its ONVIF Client temporarily conformant with this Profile if it correctly operates with at least ONE (1) Device conformant with this Profile.
- c) For each additionally supported Profile, the ONVIF Client shall correctly operate with THREE (3) ONVIF Conformant Devices from different Members supporting the same Profile.

The temporary DoC is valid for ONE (1) year only after the date of listing by ONVIF ('Date certified'). The ONVIF office may delete such a temporary DoC without notice from the public records any time after the end of this ONE (1) year period. It is in the responsibility of the submitting Member to retest the Client for conformance with the applicable Profile and resubmit a new DoC once more conformant Devices from different members are available or the ONE (1) year period has passed.

Selection and retrieval of the respective ONVIF Devices from different members is the responsibility of the Client manufacturer for testing conformance with the ONVIF profile(s).

ONVIF recommends that mandatory features for Clients be tested with as many different Devices having implemented these features as possible.

nnexA B shows the form 'TEMPORARY Declaration of Conformance – ONVIF Client', a respective template is available to ONVIF members in the ONVIF Developers' Forum.



# 7 Plug-fest (Informative)

Plug-fests are organized by ONVIF to enhance interoperability of ONVIF Clients and Devices that implement [ONVIF Profiles]. Participation in plug-fests is strongly encouraged. Remote and on-site plug-fests may be made available. Information concerning a plug-fest is announced in advance to all Members of the ONVIF organization.



#### Annex A

### **Declaration of Conformance - ONVIF Client**

The indicated Member issues this Declaration of Conformance, and is solely responsible for declared conformance. Conformance is valid ONLY for the ONVIF Client identified when used in a manner consistent with the intent of the referenced documents.

Responsible company:		
Member name:		
Member address:		
-		
-		
Technical contact's email:		
Identified ONVIF Client:		
Product name:		
Version number:		
Product hardware version:		(if applicable)
Operating system:		(if applicable)
The ONVIF Client identified	above conforms to the following ONVIF Profiles:	
Profile Specification(s) supp	orted:	
MANDATORY reference ON	IVIF Device used (Device 1):	
Member name:		
Product name:		
Profile(s) supported:		
Product firmware version:		
MANDATORY reference ON	IVIF Device used (Device 2):	
Member name:		
Product name:		
Profile(s) supported:		
Product firmware version:		



MANDATORY reference ON	VIF Device used (Device 3):
Member name:	
Product name:	
Profile(s) supported:	
Product firmware version:	
Reference ONVIF Device us	ed (Device 4):
Member name:	
Product name:	
Profile(s) supported:	
Product firmware version:	
Reference ONVIF Device us	ed (Device 5):
Member name:	
Product name:	
Profile(s) supported:	
Product firmware version:	
Reference ONVIF Device us	ed (Device 6):
Member name:	
Product name:	
Profile(s) supported:	
Product firmware version:	
· · ·	e Member acknowledges that the Client conforms to the requirements applicable conditional features as stated in the specification(s) of the
Signature of Authorized Repo	resentative:
Signature:	
Name:	
Title and Department:	
Date:	

Responsible company:



#### **Annex B**

# **TEMPORARY Declaration of Conformance – ONVIF Client**

The indicated Member issues this Declaration of Conformance, and is solely responsible for declared conformance. Conformance is valid ONLY for the ONVIF Client identified when used in a manner consistent with the intent of the referenced documents. This DoC is valid for ONE (1) year only as fewer than THREE (3) ONVIF conformant Devices are available for testing at least one of the below listed Profile(s).

Member name:		
Member address:		
Technical contact's email:		
Identified ONVIF Client:		
Product name:		
Version number:		
Product hardware version:		(if applicable)
Operating system:		(if applicable)
The ONVIF Client identified	d above conforms to the following ONVIF Profiles:	
Profile Specification(s) supp	ported:	
MANDATORY reference OI	NVIF Device used (Device 1):	
Member name:		
Product name:		
Profile(s) supported:		
Product firmware version:		
Reference ONVIF Device used (Device 2):		
Member name:		
Product name:		
Profile(s) supported:		
Product firmware version:		



Reference ONVIF Device used (Device 3):
Member name:
Product name:
Profile(s) supported:
Product firmware version:
Reference ONVIF Device used (Device 4):
Member name:
Product name:
Profile(s) supported:
Product firmware version:
Reference ONVIF Device used (Device 5):
Member name:
Product name:
Profile(s) supported:
Product firmware version:
Reference ONVIF Device used (Device 6):
Member name:
Product name:
Profile(s) supported:
Product firmware version:
By signing this document the Member acknowledges     that the Client conforms to the requirements related to the mandatory <u>and</u> applicable conditional features as stated in the specification(s) of the claimed profile(s) and     that this DoC is valid for one year only due to limitations in existing reference Devices.
Signature of Authorized Representative:
Signature:
Name:
Title and Department:
Date:



# **Annex C**

# **Communication Address of ONVIF Office**

(Informative)

The set of conformance documents, as defined in Section 4.3, shall be sent electronically to the following e-mail address:

E-mail address: DoC@onvif.org



#### **Annex D**

# **Handling of Disputes**

(Informative)

# D.1 Handling of Interoperability Related Claims

A Member or user that discovers an interoperability issue between two Profile Conformant products should follow below listed steps:

- Concerned parties should first seek to communicate directly and handle/solve the
  identified issue. A respective Interface Guide provides contact information, alternatively
  the ONVIF office (help@onvif.org) may be used to provide contact information where
  needed. Members may also address technical interoperability issues related to the ONVIF
  specs in the ONVIF Forum.
- 2. In case one party requests escalation: The Member or user should contact the ONVIF office (help@onvif.org), copying the ONVIF Executive Director (onvif\_ed@inventures.com) with a description of the claim (including specific information about the conformant products such as product name, version number, claimed conformance, etc.) and the reason for escalation.
- 3. The ONVIF Executive Director shall request supporting material from all involved parties
  - a) Claim description and supporting evidence of non-conformity
  - b) DoC and test report (should already be available at ONVIF office)
  - c) Supported Feature List
- 4. ONVIF office shall forward the issue to the TSC & issue a ticket in the [ONVIF WG Platform] with the information related to the case.
- 5. TSC to address in and respond to the ONVIF Executive Director after the next conference call (twice a month) with a proposal on how to handle the claim.

# D.2 Handling of Improper Claims of Conformance

Examples of cases concerned:

- A. An ONVIF Member claims conformance for a product / a specific version of a product and has not yet submitted a DoC to the ONVIF office (specific product not listed on the ONVIF homepage)
- B. The conformance claim for a specific product by the ONVIF Member differs from/ exceeds the DoC submitted to the ONVIF office and listed on the ONVIF homepage
- C. A company which is not / no longer an ONVIF Member is claiming ONVIF conformance for a product.



#### Process:

- Member or user addresses the ONVIF office (<u>help@onvif.org</u>) and copies the ONVIF Executive Director (<u>onvif\_ed@inventures.com</u>) with a description of the claim (including specific information about the conformant products such as product name, version number, claimed conformance, etc.) and the reason for escalation.
- ONVIF Executive Director shall request from the concerned Member a proper DoC for the
  concerned product and to temporarily halt publication of any conformance claims for the
  concerned product (website, PR, product material) until ONVIF Membership in good
  standing is obtained and respective conformance documents are submitted to the ONVIF
  office and are accepted.