ONVIF®

Interface Guide Specification

Version 1.1.1

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Revision history

| Vers. | Date | Description | Contributors |
| --- | --- | --- | --- |
| 1.0 | 2013-09-19 | Initial requirements | * 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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Table of Contents

[ONVIF® 1](#_Toc73532522)

[Interface Guide Specification 1](#_Toc73532523)

[1 Introduction 6](#_Toc73532524)

[1.1 IMPORTANT 6](#_Toc73532525)

[1.2 Scope 6](#_Toc73532526)

[1.3 Normative References 6](#_Toc73532527)

[1.4 Informative References 6](#_Toc73532528)

[2 Terms and Definitions 8](#_Toc73532529)

[2.1 Conventions 8](#_Toc73532530)

[2.2 Definitions 8](#_Toc73532531)

[3 Purpose of the ONVIF Interface Guide 9](#_Toc73532532)

[4 Requirement Levels 10](#_Toc73532533)

[5 Mandatory Sections 11](#_Toc73532534)

[5.1 Overview 11](#_Toc73532535)

[5.2 Prerequisites 12](#_Toc73532536)

[5.3 Installation 12](#_Toc73532537)

[5.4 Default Network Settings 12](#_Toc73532538)

[5.5 Default Login 12](#_Toc73532539)

[5.6 Local Configuration 12](#_Toc73532540)

[5.7 Enabling ONVIF 12](#_Toc73532541)

[5.8 Querying Capabilities 13](#_Toc73532542)

[6 Optional Sections 14](#_Toc73532543)

[6.1 Remote Configuration 14](#_Toc73532544)

[7 XML Template 15](#_Toc73532545)

[8 Suggested tools and more information 16](#_Toc73532546)

# Introduction

## IMPORTANT

This ONVIF Interface Guide Specification v1.1.1 replaces the previously released version 1.1. As of June 2, 2021 ONVIF Members shall only apply this version of the specification together with the latest XML template to prepare an Interface Guide.

In order to facilitate 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.

## Scope

This specification defines and describes the ONVIF Interface Guide, which shall accompany any DoC submission via the ONVIF Member Portal as part of the ONVIF Conformance Process.

## Normative References

[ONVIF Conformance Process] ONVIF Conformance Process Specification  
URL: <https://www.onvif.org/profiles/conformance/>

[DocBook-v5.x] 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/>

## Informative References

[ONVIF Profile Specs] All ONVIF Profiles Specifications documents  
URL: <https://www.onvif.org/profiles/>

[ONVIF Specifications] All ONVIF Network Interface Specifications documents  
URL: <https://www.onvif.org/profiles/specifications/>

[ONVIF Test Spec] ONVIF, “Device Test Specifications”   
URL: <https://www.onvif.org/profiles/conformance/device-test/>

or “Client Test Specifications”  
URL: <https://www.onvif.org/profiles/conformance/client-test/>

[ONVIF Test Tool] ONVIF, “Device Test Tool” or “Client Test Tool” as applicable  
URL: https://developer.onvif.org/forum.php (Accessible to ONVIF members only)

[ONVIF Logo] ONVIF, “Logo Guidelines”  
URL: http://www.onvif.org/wp-content/uploads/2018/08/ONVIF\_Brand\_Logo\_Trademark\_Standards.pdf

[ONVIF Profile Policy] Profile Policy  
URL: <https://www.onvif.org/profiles/>

[ISO/IEC Directives] ISO/IEC Directives Part 2 “Principles and rules for the structure and drafting of ISO and IEC documents”, chapter 7 “Verbal forms for expression of provisions”

[ISO/IEC G2] ISO/IEC Guide 2 “Standardization and Related Activities: General Vocabulary”

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

# Terms and Definitions

## 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].

## 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

profile 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 basic product identifier including the product name and model

Version Number release number for firmware version or client software version

# 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. 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].

# 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

# 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.

## 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.

### Product Information

* [M] Product type. Can be device, client or device/client.
* [O] Company Logo
* [M] Product Name and Version Number. This section shall list the matching Product Name and FW/SW Version Number as identified in the DoC and in the feature list.
* [C] For use with a family of products DoC, the ONVIF Interface Guide shall include all applicable product names (as identified in the DoC).

### Supported ONVIF Profiles

* [M] List of supported ONVIF Profiles

### Support Information

* [M] Technical Support contact information including:
  + [M] General international support mailing address
    - [M] Company name
    - [M] Street name and number
    - [M] City
    - [O] State
    - [O] Postal code
    - [M] Country
  + [O] Regional support contact address
  + [M] Technical support website URL
  + [O] Technical support email
  + [O] Technical support phone

## Prerequisites

* [C] Hardware or software required to interact with each of the ONVIF clients or devices, including:
  + Hardware and operating system
  + Internet browser
  + Network configuration

## Installation

* [M] Instructions for how to install the product as applicable, could include:
  + Power Source
  + Network Connection
  + Wiring
  + Software installation

## 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

## 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

## 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, including:
  + [M] Where to find (path, menus, settings, etc.)
  + [C] On-board configuration

## 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.

## 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

# Optional Sections

The ONVIF Interface Guide may provide the following sections:

## 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

# XML Template

Members shall use the most current XML template available to create their Interface Guide. The provided XML document template uses the DocBook v5.x standard.

The template is available in the Member Portal/Test Tool Download under “Device Test Tool” (login required).

# Suggested tools and more information

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

Interface Guide creation:

* <https://www.onvif.org/profiles/conformance/interface-guide/interface-guide-creation/>