

**ONVIF™**  
**Test Specification Ver 1.02.4**  
**Release Notes**

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## Overview

### **Important:**

This ONVIF Test Specification v1.02.4 replaces the previously released version 1.02.2 along with the errata accepted. As of 2011-11-01 ONVIF members shall only declare conformance of a product with ONVIF specifications with reference to this Test Specification version 1.02.4.

- For ease of maintainability and modularity, the Test Specification is now divided into multiple specification documents:
  - [ONVIF Test] specification document: Entry point document.
  - [ONVIF Base Test] specification document: Device Management, IP Configuration, Discovery, Security and Event Handling.
  - [ONVIF Media Test] specification document: Media configuration and Real-time streaming.
  - [ONVIF PTZ Test] specification document: PTZ configuration and control.
- Because of the separation of the test cases into different documents a new document-independent scheme of test case ID has been put in place for all test cases.
- 76 new test cases were introduced to enhance interoperability among ONVIF devices. ONVIF aspects now being covered by test cases:
  - Relay outputs,
  - Audio inputs,
  - XML namespace validation,
  - Configuration entities consistency,
  - Multicast streaming and configuration.
- For the purpose of clarification, several errata for [ONVIF Core] have been incorporated that have been applied to [ONVIF Core] ver1.02, ver2.0, ver2.1 or later version.

## New Test Case ID

The following tables list all test cases incorporated in Test Specification 1.02.4 with their new ID and reference to their relative test case in 1.02.2.

### 1.1. IP Configuration Test Cases

New ID	New Test Case Name	1.02.2 ID	1.02.2 Test Case Name
IPCONFIG-1-1-1	IPV4 STATIC IP	4.1.1	NVT IPV4 STATIC IP
IPCONFIG-1-1-2	IPV4 LINK LOCAL ADDRESS	4.1.2	NVT IPV4 LINK LOCAL ADDRESS
IPCONFIG-1-1-3	IPV4 DHCP	4.1.3	NVT IPV4 DHCP
IPCONFIG-2-1-1	IPV6 STATIC IP	4.2.1	NVT IPV6 STATIC IP
IPCONFIG-2-1-2	IPV6 STATELESS IP CONFIGURATION - ROUTER ADVERTISEMENT	4.2.2	NVT IPV6 STATELESS IP CONFIGURATION - ROUTER ADVERTISEMENT
IPCONFIG-2-1-3	IPV6 STATELESS IP CONFIGURATION - NEIGHBOUR DISCOVERY	4.2.3	NVT IPV6 STATELESS IP CONFIGURATION - NEIGHBOUR DISCOVERY
IPCONFIG-2-1-4	IPV6 STATEFUL IP CONFIGURATION	4.2.4	NVT IPV6 STATEFUL IP CONFIGURATION

### 1.2. Device Discovery Test Cases

New ID	New Test Case Name	1.02.2 ID	1.02.2 Test Case Name
DISCOVERY-1-1-1	HELLO MESSAGE	5.1	NVT HELLO MESSAGE
DISCOVERY-1-1-2	HELLO MESSAGE VALIDATION	5.2	NVT HELLO MESSAGE VALIDATION
DISCOVERY-1-1-3	SEARCH BASED ON DEVICE SCOPE TYPES	5.3	NVT SEARCH BASED ON DEVICE SCOPE TYPES
DISCOVERY-1-1-4	SEARCH WITH OMITTED DEVICE AND SCOPE TYPES	5.4	NVT SEARCH WITH OMITTED DEVICE AND SCOPE TYPES
DISCOVERY-1-1-5	RESPONSE TO INVALID SEARCH REQUEST	5.5	NVT RESPONSE TO INVALID SEARCH REQUEST
DISCOVERY-1-1-6	SEARCH USING UNICAST PROBE MESSAGE	5.6	NVT SEARCH USING UNICAST PROBE MESSAGE
DISCOVERY-1-1-7	DEVICE SCOPES CONFIGURATION	5.7	NVT DEVICE SCOPES CONFIGURATION
DISCOVERY-1-1-8	BYE MESSAGE	5.8	NVT BYE MESSAGE
DISCOVERY-1-1-9	DISCOVERY MODE CONFIGURATION	5.9	NVT DISCOVERY MODE CONFIGURATION
DISCOVERY-1-1-10	SOAP FAULT MESSAGE	5.10	NVT SOAP FAULT MESSAGE

### 1.3. Device Management Test Cases

New ID	New Test Case Name	1.02.2 ID	1.02.2 Test Case Name
DEVICE-1-1-1	GET WSDL URL	6.1.1	NVT GET WSDL URL
DEVICE-1-1-2	ALL CAPABILITIES	6.1.2	NVT ALL CAPABILITIES
DEVICE-1-1-3	DEVICE CAPABILITIES	6.1.3	NVT DEVICE CAPABILITIES
DEVICE-1-1-4	MEDIA CAPABILITIES	6.1.4	NVT MEDIA CAPABILITIES
DEVICE-1-1-5	EVENT CAPABILITIES	6.1.5	NVT EVENT CAPABILITIES
DEVICE-1-1-6	PTZ CAPABILITIES	6.1.6	NVT PTZ CAPABILITIES
DEVICE-1-1-7	SERVICE CATEGORY CAPABILITIES	6.1.7	NVT SERVICE CATEGORY CAPABILITIES
DEVICE-1-1-9	SOAP FAULT MESSAGE	6.1.8	NVT SOAP FAULT MESSAGE
DEVICE-2-1-1	NETWORK COMMAND HOSTNAME CONFIGURATION	6.2.1	NVT NETWORK COMMAND HOSTNAME CONFIGURATION
DEVICE-2-1-2	NETWORK COMMAND SETHOSTNAME TEST	6.2.2	NVT NETWORK COMMAND SETHOSTNAME TEST
DEVICE-2-1-3	NETWORK COMMAND SETHOSTNAME TEST ERROR CASE	6.2.3	NVT NETWORK COMMAND SETHOSTNAME TEST ERROR CASE
DEVICE-2-1-4	GET DNS CONFIGURATION	6.2.4	NVT GET DNS CONFIGURATION
DEVICE-2-1-5	SET DNS CONFIGURATION - SEARCHDOMAIN	6.2.5	NVT SET DNS CONFIGURATION - SEARCHDOMAIN
DEVICE-2-1-6	SET DNS CONFIGURATION - DNSMANUAL IPV4	6.2.6	NVT SET DNS CONFIGURATION - DNSMANUAL IPV4
DEVICE-2-1-7	SET DNS CONFIGURATION - DNSMANUAL IPV6	6.2.7	NVT SET DNS CONFIGURATION - DNSMANUAL IPV6
DEVICE-2-1-8	SET DNS CONFIGURATION - FROMDHCP	6.2.8	NVT SET DNS CONFIGURATION - FROMDHCP
DEVICE-2-1-9	SET DNS CONFIGURATION - DNSMANUAL INVALID IPV4	6.2.9	NVT SET DNS CONFIGURATION - DNSMANUAL INVALID IPV4
DEVICE-2-1-10	SET DNS CONFIGURATION - DNSMANUAL INVALID IPV6	6.2.10	NVT SET DNS CONFIGURATION - DNSMANUAL INVALID IPV6
DEVICE-2-1-11	GET NTP CONFIGURATION	6.2.11	NVT GET NTP CONFIGURATION
DEVICE-2-1-12	SET NTP CONFIGURATION - NTPMANUAL IPV4	6.2.12	NVT SET NTP CONFIGURATION - NTPMANUAL IPV4
DEVICE-2-1-13	SET NTP CONFIGURATION - NTPMANUAL IPV6	6.2.13	NVT SET NTP CONFIGURATION - NTPMANUAL IPV6
DEVICE-2-1-14	SET NTP CONFIGURATION - FROMDHCP	6.2.14	NVT SET NTP CONFIGURATION - FROMDHCP
DEVICE-2-1-15	SET NTP CONFIGURATION - NTPMANUAL INVALID IPV4	6.2.15	NVT SET NTP CONFIGURATION - NTPMANUAL INVALID IPV4
DEVICE-2-1-16	SET NTP CONFIGURATION - NTPMANUAL INVALID IPV6	6.2.16	NVT SET NTP CONFIGURATION - NTPMANUAL INVALID IPV6
DEVICE-2-1-17	GET NETWORK INTERFACE CONFIGURATION	6.2.17	NVT GET NETWORK INTERFACE CONFIGURATION
DEVICE-2-1-18	SET NETWORK INTERFACE CONFIGURATION - IPV4	6.2.18	NVT SET NETWORK INTERFACE CONFIGURATION - IPV4
DEVICE-2-1-19	SET NETWORK INTERFACE CONFIGURATION - IPV6	6.2.19	NVT SET NETWORK INTERFACE CONFIGURATION - IPV6
DEVICE-2-1-20	SET NETWORK INTERFACE CONFIGURATION - INVALID IPV4	6.2.20	NVT SET NETWORK INTERFACE CONFIGURATION - INVALID IPV4

New ID	New Test Case Name	1.02.2 ID	1.02.2 Test Case Name
DEVICE-2-1-21	SET NETWORK INTERFACE CONFIGURATION - INVALID IPV6	6.2.21	NVT SET NETWORK INTERFACE CONFIGURATION - INVALID IPV6
DEVICE-2-1-22	GET NETWORK PROTOCOLS CONFIGURATION	6.2.22	NVT GET NETWORK PROTOCOLS CONFIGURATION
DEVICE-2-1-23	SET NETWORK PROTOCOLS CONFIGURATION	6.2.23	NVT SET NETWORK PROTOCOLS CONFIGURATION
DEVICE-2-1-24	SET NETWORK PROTOCOLS CONFIGURATION - UNSUPPORTED PROTOCOLS	6.2.24	NVT SET NETWORK PROTOCOLS CONFIGURATION - UNSUPPORTED PROTOCOLS
DEVICE-2-1-25	GET NETWORK DEFAULT GATEWAY CONFIGURATION	6.2.25	NVT GET NETWORK DEFAULT GATEWAY CONFIGURATION
DEVICE-2-1-26	SET NETWORK DEFAULT GATEWAY CONFIGURATION - IPV4	6.2.26	NVT SET NETWORK DEFAULT GATEWAY CONFIGURATION - IPV4
DEVICE-2-1-27	SET NETWORK DEFAULT GATEWAY CONFIGURATION - IPV6	6.2.27	NVT SET NETWORK DEFAULT GATEWAY CONFIGURATION - IPV6
DEVICE-2-1-28	SET NETWORK DEFAULT GATEWAY CONFIGURATION - INVALID IPV4	6.2.28	NVT SET NETWORK DEFAULT GATEWAY CONFIGURATION - INVALID IPV4
DEVICE-2-1-29	SET NETWORK DEFAULT GATEWAY CONFIGURATION - INVALID IPV6	6.2.29	NVT SET NETWORK DEFAULT GATEWAY CONFIGURATION - INVALID IPV6
DEVICE-3-1-1	SYSTEM COMMAND GETSYSTEMDATEANDTIME	6.3.1	NVT SYSTEM COMMAND GETSYSTEMDATEANDTIME
DEVICE-3-1-2	SYSTEM COMMAND SETSYSTEMDATEANDTIME	6.3.2	NVT SYSTEM COMMAND SETSYSTEMDATEANDTIME
DEVICE-3-1-3	SYSTEM COMMAND SETSYSTEMDATEANDTIME USING NTP	6.3.3	NVT SYSTEM COMMAND SETSYSTEMDATEANDTIME USING NTP
DEVICE-3-1-4	SYSTEM COMMAND SETSYSTEMDATEANDTIME TEST FOR INVALID TIMEZONE	6.3.4	NVT SYSTEM COMMAND SETSYSTEMDATEANDTIME TEST FOR INVALID TIMEZONE
DEVICE-3-1-5	SYSTEM COMMAND SETSYSTEMDATEANDTIME TEST FOR INVALID DATE	6.3.5	NVT SYSTEM COMMAND SETSYSTEMDATEANDTIME TEST FOR INVALID DATE
DEVICE-3-1-6	SYSTEM COMMAND FACTORY DEFAULT HARD	6.3.6	NVT SYSTEM COMMAND FACTORY DEFAULT HARD
DEVICE-3-1-7	SYSTEM COMMAND FACTORY DEFAULT SOFT	6.3.7	NVT SYSTEM COMMAND FACTORY DEFAULT SOFT
DEVICE-3-1-8	SYSTEM COMMAND REBOOT	6.3.8	NVT SYSTEM COMMAND REBOOT
DEVICE-3-1-9	SYSTEM COMMAND DEVICE INFORMATION	6.3.9	NVT SYSTEM COMMAND DEVICE INFORMATION
DEVICE-3-1-10	SYSTEM COMMAND GETSYSTEMLOG	New to 1.02.4 Test Specification.	
DEVICE-4-1-1	SECURITY COMMAND GETUSERS	6.4.1	NVT SECURITY COMMAND GETUSERS
DEVICE-4-1-2	SECURITY COMMAND CREATEUSERS	6.4.2	NVT SECURITY COMMAND CREATEUSERS
DEVICE-4-1-3	SECURITY COMMAND CREATEUSERS ERROR CASE	6.4.3	NVT SECURITY COMMAND CREATEUSERS ERROR CASE
DEVICE-4-1-4	SECURITY COMMAND DELETEUSERS	6.4.4	NVT SECURITY COMMAND DELETEUSERS
DEVICE-4-1-5	SECURITY COMMAND DELETEUSERS ERROR CASE	6.4.5	NVT SECURITY COMMAND DELETEUSERS ERROR CASE
DEVICE-4-1-6	SECURITY COMMAND DELETEUSERS DELETE ALL USERS	6.4.6	NVT SECURITY COMMAND DELETEUSERS DELETE ALL USERS

New ID	New Test Case Name	1.02.2 ID	1.02.2 Test Case Name
DEVICE-4-1-7	SECURITY COMMAND SETUSER	6.4.7	NVT SECURITY COMMAND SETUSER
DEVICE-4-1-8	SECURITY COMMAND USER MANAGEMENT ERROR CASE	6.4.8	NVT SECURITY COMMAND USER MANAGEMENT ERROR CASE
DEVICE-5-1-1	IO COMMAND GETRELAYOUTPUTS	New to 1.02.4 Test Specification.	
DEVICE-5-1-2	RELAY OUTPUTS COUNT IN GETRELAYOUTPUTS AND GETCAPABILITIES	New to 1.02.4 Test Specification.	
DEVICE-5-1-4	IO COMMAND SETRELAYOUTPUTSETTINGS – INVALID TOKEN	New to 1.02.4 Test Specification.	
DEVICE-5-1-10	IO COMMAND SETRELAYOUTPUTSTATE – INVALID TOKEN	New to 1.02.4 Test Specification.	
DEVICE-6-1-1	DEVICE MANAGEMENT - NAMESPACES (DEFAULT NAMESPACES FOR EACH TAG)	New to 1.02.4 Test Specification.	
DEVICE-6-1-2	DEVICE MANAGEMENT - NAMESPACES (DEFAULT NAMESPACES FOR PARENT TAG)	New to 1.02.4 Test Specification.	
DEVICE-6-1-3	DEVICE MANAGEMENT - NAMESPACES (NOT STANDARD PREFIXES)	New to 1.02.4 Test Specification.	
DEVICE-6-1-4	DEVICE MANAGEMENT - NAMESPACES (DIFFERENT PREFIXES FOR THE SAME NAMESPACE)	New to 1.02.4 Test Specification.	
DEVICE-6-1-5	DEVICE MANAGEMENT - NAMESPACES (THE SAME PREFIX FOR DIFFERENT NAMESPACES)	New to 1.02.4 Test Specification.	

#### 1.4. Media Test Cases

New ID	New Test Case Name	1.02.2 ID	1.02.2 Test Case Name
MEDIA-1-1-1	MEDIA PROFILE CONFIGURATION	7.1.1	NVT MEDIA PROFILE CONFIGURATION
MEDIA-1-1-2	DYNAMIC MEDIA PROFILE CONFIGURATION	7.1.2	NVT DYNAMIC MEDIA PROFILE CONFIGURATION
MEDIA-1-1-3	PROFILES CONSISTENCY	New to 1.02.4 Test Specification.	
MEDIA-2-1-1	VIDEO SOURCE CONFIGURATION	7.2.1	NVT VIDEO SOURCE CONFIGURATION
MEDIA-2-1-2	VIDEO ENCODER CONFIGURATION	7.2.2	NVT VIDEO ENCODER CONFIGURATION
MEDIA-2-1-3	JPEG VIDEO ENCODER CONFIGURATION	7.2.3	NVT JPEG VIDEO ENCODER CONFIGURATION
MEDIA-2-1-4	MPEG4 VIDEO ENCODER CONFIGURATION	7.2.4	NVT MPEG4 VIDEO ENCODER CONFIGURATION
MEDIA-2-1-5	H.264 VIDEO ENCODER CONFIGURATION	7.2.5	NVT H.264 VIDEO ENCODER CONFIGURATION
MEDIA-2-1-6	GUARANTEED NUMBER OF VIDEO ENCODER INSTANCES	7.2.6	NVT GUARANTEED NUMBER OF VIDEO ENCODER INSTANCES
MEDIA-2-2-1	VIDEO SOURCE CONFIGURATIONS AND PROFILES CONSISTENCY	New to 1.02.4 Test Specification.	

New ID	New Test Case Name	1.02.2 ID	1.02.2 Test Case Name
MEDIA-2-2-2	VIDEO SOURCE CONFIGURATIONS AND VIDEO SOURCE CONFIGURATION CONSISTENCY		New to 1.02.4 Test Specification.
MEDIA-2-2-3	VIDEO SOURCE CONFIGURATIONS AND VIDEO SOURCE CONFIGURATION OPTIONS CONSISTENCY		New to 1.02.4 Test Specification.
MEDIA-2-2-4	PROFILES AND VIDEO SOURCE CONFIGURATION OPTIONS CONSISTENCY		New to 1.02.4 Test Specification.
MEDIA-2-2-5	VIDEO SOURCE CONFIGURATIONS AND VIDEO SOURCES CONSISTENCY		New to 1.02.4 Test Specification.
MEDIA-2-2-6	VIDEO SOURCE CONFIGURATION USE COUNT (CURRENT STATE)		New to 1.02.4 Test Specification.
MEDIA-2-2-7	VIDEO SOURCE CONFIGURATION USE COUNT (ADD SAME VIDEO SOURCE CONFIGURATION TO PROFILE TWICE)		New to 1.02.4 Test Specification.
MEDIA-2-2-8	VIDEO SOURCE CONFIGURATION USE COUNT (ADD DIFFERENT VIDEO SOURCE CONFIGURATIONS IN PROFILE)		New to 1.02.4 Test Specification.
MEDIA-2-2-9	VIDEO SOURCE CONFIGURATION USE COUNT (REMOVE VIDEO SOURCE CONFIGURATION)		New to 1.02.4 Test Specification.
MEDIA-2-2-10	VIDEO SOURCE CONFIGURATION USE COUNT (DELETION PROFILE WITH VIDEO SOURCE CONFIGURATION)		New to 1.02.4 Test Specification.
MEDIA-2-2-11	VIDEO SOURCE CONFIGURATION USE COUNT (SET VIDEO SOURCE CONFIGURATION)		New to 1.02.4 Test Specification.
MEDIA-2-3-1	VIDEO ENCODER CONFIGURATIONS AND PROFILES CONSISTENCY		New to 1.02.4 Test Specification.
MEDIA-2-3-2	VIDEO ENCODER CONFIGURATIONS AND VIDEO ENCODER CONFIGURATION CONSISTENCY		New to 1.02.4 Test Specification.
MEDIA-2-3-3	VIDEO ENCODER CONFIGURATIONS AND VIDEO ENCODER CONFIGURATION OPTIONS CONSISTENCY		New to 1.02.4 Test Specification.
MEDIA-2-3-4	PROFILES AND VIDEO ENCODER CONFIGURATION OPTIONS CONSISTENCY		New to 1.02.4 Test Specification.
MEDIA-2-3-5	VIDEO ENCODER CONFIGURATION USE COUNT (CURRENT STATE)		New to 1.02.4 Test Specification.
MEDIA-2-3-6	VIDEO ENCODER CONFIGURATION USE COUNT (ADD SAME VIDEO ENCODER CONFIGURATION TO PROFILE TWICE)		New to 1.02.4 Test Specification.
MEDIA-2-3-7	VIDEO ENCODER CONFIGURATION USE COUNT (ADD DIFFERENT VIDEO ENCODER CONFIGURATIONS IN PROFILE)		New to 1.02.4 Test Specification.



New ID	New Test Case Name	1.02.2 ID	1.02.2 Test Case Name
MEDIA-2-3-8	VIDEO ENCODER CONFIGURATION USE COUNT (REMOVE VIDEO ENCODER CONFIGURATION)	New to 1.02.4 Test Specification.	
MEDIA-2-3-9	VIDEO ENCODER CONFIGURATION USE COUNT (PROFILE DELETION WITH VIDEO ENCODER CONFIGURATION)	New to 1.02.4 Test Specification.	
MEDIA-2-3-10	VIDEO ENCODER CONFIGURATION USE COUNT (SET VIDEO ENCODER CONFIGURATION)	New to 1.02.4 Test Specification.	
MEDIA-3-1-1	AUDIO SOURCE CONFIGURATION	7.3.1	NVT AUDIO SOURCE CONFIGURATION
MEDIA-3-1-2	AUDIO ENCODER CONFIGURATION	7.3.2	NVT AUDIO ENCODER CONFIGURATION
MEDIA-3-1-3	G.711 AUDIO ENCODER CONFIGURATION	7.3.3	NVT G.711 AUDIO ENCODER CONFIGURATION
MEDIA-3-1-4	G.726 AUDIO ENCODER CONFIGURATION	7.3.4	NVT G.726 AUDIO ENCODER CONFIGURATION
MEDIA-3-1-5	AAC AUDIO ENCODER CONFIGURATION	7.3.5	NVT AAC AUDIO ENCODER CONFIGURATION
MEDIA-3-1-6	GET AUDIO SOURCE CONFIGURATION – INVALID CONFIGURATIONTOKEN	New to 1.02.4 Test Specification.	
MEDIA-3-1-7	GET AUDIO SOURCE CONFIGURATION OPTIONS	New to 1.02.4 Test Specification.	
MEDIA-3-1-8	GET AUDIO SOURCE CONFIGURATION OPTIONS – INVALID PROFILETOKEN	New to 1.02.4 Test Specification.	
MEDIA-3-1-9	GET AUDIO SOURCE CONFIGURATION OPTIONS – INVALID CONFIGURATION TOKEN	New to 1.02.4 Test Specification.	
MEDIA-3-1-10	SET AUDIO SOURCE CONFIGURATION – INVALID TOKEN	New to 1.02.4 Test Specification.	
MEDIA-3-2-1	AUDIO SOURCE CONFIGURATIONS AND PROFILES CONSISTENCY	New to 1.02.4 Test Specification.	
MEDIA-3-2-2	AUDIO SOURCE CONFIGURATIONS AND AUDIO SOURCE CONFIGURATION CONSISTENCY	New to 1.02.4 Test Specification.	
MEDIA-3-2-3	AUDIO SOURCE CONFIGURATIONS AND AUDIO SOURCE CONFIGURATION OPTIONS CONSISTENCY	New to 1.02.4 Test Specification.	
MEDIA-3-2-4	PROFILES AND AUDIO SOURCE CONFIGURATION OPTIONS CONSISTENCY	New to 1.02.4 Test Specification.	
MEDIA-3-2-5	AUDIO SOURCE CONFIGURATIONS AND AUDIO SOURCES CONSISTENCY	New to 1.02.4 Test Specification.	
MEDIA-3-2-6	AUDIO SOURCE CONFIGURATION USE COUNT (CURRENT STATE)	New to 1.02.4 Test Specification.	
MEDIA-3-2-7	AUDIO SOURCE CONFIGURATION USE COUNT (ADD SAME AUDIO SOURCE CONFIGURATION TO PROFILE TWICE)	New to 1.02.4 Test Specification.	

New ID	New Test Case Name	1.02.2 ID	1.02.2 Test Case Name
MEDIA-3-2-8	AUDIO SOURCE CONFIGURATION USE COUNT (ADD DIFFERENT AUDIO SOURCE CONFIGURATIONS IN PROFILE)	New to 1.02.4 Test Specification.	
MEDIA-3-2-9	AUDIO SOURCE CONFIGURATION USE COUNT (REMOVE AUDIO SOURCE CONFIGURATION)	New to 1.02.4 Test Specification.	
MEDIA-3-2-10	AUDIO SOURCE CONFIGURATION USE COUNT (PROFILE DELETION WITH AUDIO SOURCE CONFIGURATION)	New to 1.02.4 Test Specification.	
MEDIA-3-2-11	AUDIO SOURCE CONFIGURATION USE COUNT (SET AUDIO SOURCE CONFIGURATION)	New to 1.02.4 Test Specification.	
MEDIA-3-3-1	AUDIO ENCODER CONFIGURATIONS AND PROFILES CONSISTENCY	New to 1.02.4 Test Specification.	
MEDIA-3-3-2	AUDIO ENCODER CONFIGURATIONS AND AUDIO ENCODER CONFIGURATION CONSISTENCY	New to 1.02.4 Test Specification.	
MEDIA-3-3-3	AUDIO ENCODER CONFIGURATIONS AND AUDIO ENCODER CONFIGURATION OPTIONS CONSISTENCY	New to 1.02.4 Test Specification.	
MEDIA-3-3-4	PROFILES AND AUDIO ENCODER CONFIGURATION OPTIONS CONSISTENCY	New to 1.02.4 Test Specification.	
MEDIA-3-3-5	AUDIO ENCODER CONFIGURATION USE COUNT (CURRENT STATE)	New to 1.02.4 Test Specification.	
MEDIA-3-3-6	AUDIO ENCODER CONFIGURATION USE COUNT (ADD SAME AUDIO ENCODER CONFIGURATION TO PROFILE TWICE)	New to 1.02.4 Test Specification.	
MEDIA-3-3-7	AUDIO ENCODER CONFIGURATION USE COUNT (ADD DIFFERENT AUDIO ENCODER CONFIGURATIONS IN PROFILE)	New to 1.02.4 Test Specification.	
MEDIA-3-3-8	AUDIO ENCODER CONFIGURATION USE COUNT (REMOVE AUDIO ENCODER CONFIGURATION)	New to 1.02.4 Test Specification.	
MEDIA-3-3-9	AUDIO ENCODER CONFIGURATION USE COUNT (DELETION PROFILE WITH AUDIO ENCODER CONFIGURATION)	New to 1.02.4 Test Specification.	
MEDIA-3-3-10	AUDIO ENCODER CONFIGURATION USE COUNT (SET AUDIO ENCODER CONFIGURATION)	New to 1.02.4 Test Specification.	
MEDIA-4-1-1	PTZ CONFIGURATION	7.4.1	NVT PTZ CONFIGURATION
MEDIA-4-1-2	PTZ CONFIGURATIONS AND PROFILES CONSISTENCY	New to 1.02.4 Test Specification.	
MEDIA-5-1-1	METADATA CONFIGURATION	7.5.1	NVT METADATA CONFIGURATION
MEDIA-6-1-1	SNAPSHOT URI	7.6.1	NVT SNAPSHOT URI

New ID	New Test Case Name	1.02.2 ID	1.02.2 Test Case Name
MEDIA-7-1-1	SOAP FAULT MESSAGE	7.7.1	NVT SOAP FAULT MESSAGE
MEDIA-7-1-2	SOAP FAULT MESSAGE	7.7.2	NVT SOAP FAULT MESSAGE
MEDIA-7-1-3	START MULTICAST - INVALID PROFILE TOKEN	New to 1.02.4 Test Specification.	

### 1.5. Real Time Streaming Test Cases

New ID	New Test Case Name	1.02.2 ID	1.02.2 Test Case Name
RTSS-1-1-1	MEDIA CONTROL – RTSP/TCP	8.1.1	NVT MEDIA CONTROL – RTSP/TCP
RTSS-1-1-2	MEDIA STREAMING – RTSP KEEPALIVE (SET_PARAMETER)	8.1.2	NVT MEDIA STREAMING – RTSP KEEPALIVE
RTSS-1-1-3	MEDIA STREAMING – RTSP KEEPALIVE (OPTIONS)	New to 1.02.4 Test Specification.	
RTSS-1-1-4	MEDIA STREAMING – JPEG (RTP-Unicast/ UDP)	8.1.3	NVT MEDIA STREAMING – JPEG (RTP-Unicast/ UDP)
RTSS-1-1-5	MEDIA STREAMING – JPEG (RTP-Unicast/RTSP/HTTP/TCP)	8.1.4	NVT MEDIA STREAMING – JPEG (RTP-Unicast/RTSP/HTTP/TCP)
RTSS-1-1-6	MEDIA STREAMING – JPEG (RTP/RTSP/TCP)	8.1.5	NVT MEDIA STREAMING – JPEG (RTP/RTSP/TCP)
RTSS-1-1-7	MEDIA STREAMING – MPEG4 (RTP-Unicast/ UDP)	8.1.6	NVT MEDIA STREAMING – MPEG4 (RTP-Unicast/ UDP)
RTSS-1-1-8	MEDIA STREAMING – MPEG4 (RTP-Unicast/RTSP/HTTP/TCP)	8.1.7	NVT MEDIA STREAMING – MPEG4 (RTP-Unicast/RTSP/HTTP/TCP)
RTSS-1-1-9	MEDIA STREAMING – MPEG4 (RTP/RTSP/TCP)	8.1.8	NVT MEDIA STREAMING – MPEG4 (RTP/RTSP/TCP)
RTSS-1-1-10	SET SYNCHRONIZATION POINT – MPEG4	8.1.9	NVT SET SYNCHRONIZATION POINT – MPEG4
RTSS-1-1-11	MEDIA STREAMING – H.264 (RTP-Unicast/ UDP)	8.1.10	NVT MEDIA STREAMING – H.264 (RTP-Unicast/ UDP)
RTSS-1-1-12	MEDIA STREAMING – H.264 (RTP-Unicast/RTSP/HTTP/TCP)	8.1.11	NVT MEDIA STREAMING – H.264 (RTP-Unicast/RTSP/HTTP/TCP)
RTSS-1-1-13	MEDIA STREAMING – H.264 (RTP/RTSP/TCP)	8.1.12	NVT MEDIA STREAMING – H.264 (RTP/RTSP/TCP)
RTSS-1-1-14	SET SYNCHRONIZATION POINT – H.264	8.1.13	NVT SET SYNCHRONIZATION POINT – H.264
RTSS-1-2-1	MEDIA STREAMING – JPEG (RTP-Multicast/UDP, IPv4)	New to 1.02.4 Test Specification.	
RTSS-1-2-2	MEDIA STREAMING – MPEG4 (RTP-Multicast/UDP, IPv4)	New to 1.02.4 Test Specification.	
RTSS-1-2-3	MEDIA STREAMING – H.264 (RTP-Multicast/UDP, IPv4)	New to 1.02.4 Test Specification.	
RTSS-2-1-1	MEDIA STREAMING – G.711 (RTP-Unicast/UDP)	New to 1.02.4 Test Specification.	
RTSS-2-1-2	MEDIA STREAMING – G.711 (RTP-Unicast/RTSP/HTTP/TCP)	New to 1.02.4 Test Specification.	
RTSS-2-1-3	MEDIA STREAMING – G.711 (RTP/RTSP/TCP)	New to 1.02.4 Test Specification.	
RTSS-2-1-4	MEDIA STREAMING – G.726 (RTP-Unicast/UDP)	New to 1.02.4 Test Specification.	
RTSS-2-1-5	MEDIA STREAMING – G.726 (RTP-Unicast/RTSP/HTTP/TCP)	New to 1.02.4 Test Specification.	

New ID	New Test Case Name	1.02.2 ID	1.02.2 Test Case Name
RTSS-2-1-6	MEDIA STREAMING – G.726 (RTP/RTSP/TCP)	New to 1.02.4 Test Specification.	
RTSS-2-1-7	MEDIA STREAMING – AAC (RTP-Unicast/UDP)	New to 1.02.4 Test Specification.	
RTSS-2-1-8	MEDIA STREAMING – AAC (RTP-Unicast/RTSP/HTTP/TCP)	New to 1.02.4 Test Specification.	
RTSS-2-1-9	MEDIA STREAMING – AAC (RTP/RTSP/TCP)	New to 1.02.4 Test Specification.	
RTSS-3-1-1	MEDIA STREAMING – JPEG/G.711 (RTP-Unicast/ UDP)	8.2.1	NVT MEDIA STREAMING – JPEG/G.711 (RTP-Unicast/ UDP)
RTSS-3-1-2	MEDIA STREAMING – JPEG/G.711 (RTP-Unicast/RTSP/HTTP/TCP)	8.2.2	NVT MEDIA STREAMING – JPEG/G.711 (RTP-Unicast/RTSP/HTTP/TCP)
RTSS-3-1-3	MEDIA STREAMING – JPEG/G.711 (RTP/RTSP/TCP)	8.2.3	NVT MEDIA STREAMING – JPEG/G.711 (RTP/RTSP/TCP)
RTSS-3-1-4	MEDIA STREAMING – JPEG/G.726 (RTP-Unicast/ UDP)	8.2.4	NVT MEDIA STREAMING – JPEG/G.726 (RTP-Unicast/ UDP)
RTSS-3-1-5	MEDIA STREAMING – JPEG/G.726 (RTP-Unicast/RTSP/HTTP/TCP)	8.2.5	NVT MEDIA STREAMING – JPEG/G.726 (RTP-Unicast/RTSP/HTTP/TCP)
RTSS-3-1-6	MEDIA STREAMING – JPEG/G.726 (RTP/RTSP/TCP)	8.2.6	NVT MEDIA STREAMING – JPEG/G.726 (RTP/RTSP/TCP)
RTSS-3-1-7	MEDIA STREAMING – JPEG/AAC (RTP-Unicast/ UDP)	8.2.7	NVT MEDIA STREAMING – JPEG/AAC (RTP-Unicast/ UDP)
RTSS-3-1-8	MEDIA STREAMING – JPEG/AAC (RTP-Unicast/RTSP/HTTP/TCP)	8.2.8	NVT MEDIA STREAMING – JPEG/AAC (RTP-Unicast/RTSP/HTTP/TCP)
RTSS-3-1-9	MEDIA STREAMING – JPEG/AAC (RTP/RTSP/TCP)	8.2.9	NVT MEDIA STREAMING – JPEG/AAC (RTP/RTSP/TCP)
RTSS-4-1-1	NOTIFICATION STREAMING	9.4.1	NVT NOTIFICATION STREAMING

## 1.6. Event Handling Test Cases

New ID	New Test Case Name	1.02.2 ID	1.02.2 Test Case Name
EVENT-1-1-1	GET EVENT PROPERTIES	9.1.1	NVT GET EVENT PROPERTIES
EVENT-2-1-1	BASIC NOTIFICATION INTERFACE - SUBSCRIBE	9.2.1	NVT BASIC NOTIFICATION INTERFACE - SUBSCRIBE
EVENT-2-1-2	BASIC NOTIFICATION INTERFACE - INVALID MESSAGE CONTENT FILTER	9.2.2	NVT BASIC NOTIFICATION INTERFACE - INVALID MESSAGE CONTENT FILTER
EVENT-2-1-3	BASIC NOTIFICATION INTERFACE - INVALID TOPIC EXPRESSION	9.2.3	NVT BASIC NOTIFICATION INTERFACE - INVALID TOPIC EXPRESSION
EVENT-2-1-4	BASIC NOTIFICATION INTERFACE - RENEW	9.2.4	NVT BASIC NOTIFICATION INTERFACE - RENEW
EVENT-2-1-5	BASIC NOTIFICATION INTERFACE - UNSUBSCRIBE	9.2.5	NVT BASIC NOTIFICATION INTERFACE - UNSUBSCRIBE
EVENT-2-1-6	BASIC NOTIFICATION INTERFACE - RESOURCE UNKNOWN	9.2.6	NVT BASIC NOTIFICATION INTERFACE - RESOURCE UNKNOWN
EVENT-2-1-7	BASIC NOTIFICATION INTERFACE - NOTIFY	9.2.7	NVT BASIC NOTIFICATION INTERFACE - NOTIFY
EVENT-2-1-8	BASIC NOTIFICATION INTERFACE - NOTIFY FILTER	9.2.8	NVT BASIC NOTIFICATION INTERFACE - NOTIFY FILTER
EVENT-3-1-1	REALTIME PULLPOINT SUBSCRIPTION - CREATE PULL POINT SUBSCRIPTION	9.3.1	NVT REALTIME PULLPOINT SUBSCRIPTION - CREATE PULL POINT SUBSCRIPTION

New ID	New Test Case Name	1.02.2 ID	1.02.2 Test Case Name
EVENT-3-1-2	REALTIME PULLPOINT SUBSCRIPTION - INVALID MESSAGE CONTENT FILTER	9.3.2	NVT REALTIME PULLPOINT SUBSCRIPTION - INVALID MESSAGE CONTENT FILTER
EVENT-3-1-3	REALTIME PULLPOINT SUBSCRIPTION - INVALID TOPIC EXPRESSION	9.3.3	NVT REALTIME PULLPOINT SUBSCRIPTION - INVALID TOPIC EXPRESSION
EVENT-3-1-4	REALTIME PULLPOINT SUBSCRIPTION - RENEW	9.3.4	NVT REALTIME PULLPOINT SUBSCRIPTION - RENEW
EVENT-3-1-5	REALTIME PULLPOINT SUBSCRIPTION - UNSUBSCRIBE	9.3.5	NVT REALTIME PULLPOINT SUBSCRIPTION - UNSUBSCRIBE
EVENT-3-1-6	REALTIME PULLPOINT SUBSCRIPTION - TIMEOUT	9.3.6	NVT REALTIME PULLPOINT SUBSCRIPTION - TIMEOUT
EVENT-3-1-7	REALTIME PULLPOINT SUBSCRIPTION - PULLMESSAGES	9.3.7	NVT REALTIME PULLPOINT SUBSCRIPTION - PULLMESSAGES
EVENT-3-1-8	REALTIME PULLPOINT SUBSCRIPTION - PULLMESSAGES FILTER	9.3.8	NVT REALTIME PULLPOINT SUBSCRIPTION - PULLMESSAGES FILTER

### 1.7. PTZ Control Test Cases

New ID	New Test Case Name	1.02.2 ID	1.02.2 Test Case Name
PTZ-1-1-1	PTZ NODES	10.1.1	NVT PTZ NODES
PTZ-1-1-2	PTZ NODE	10.1.2	NVT PTZ NODE
PTZ-1-1-3	SOAP FAULT MESSAGE	10.1.3	NVT SOAP FAULT MESSAGE
PTZ-2-1-1	NVT PTZ CONFIGURATIONS	10.2.1	NVT PTZ CONFIGURATIONS
PTZ-2-1-2	NVT PTZ CONFIGURATION	10.2.2	NVT PTZ CONFIGURATION
PTZ-2-1-3	NVT PTZ CONFIGURATION OPTIONS	10.2.3	NVT PTZ CONFIGURATION OPTIONS
PTZ-2-1-4	NVT PTZ SET CONFIGURATION	10.2.4	NVT PTZ SET CONFIGURATION
PTZ-2-1-5	PTZ CONFIGURATIONS AND PTZ CONFIGURATION CONSISTENCY	New to 1.02.4 Test Specification.	
PTZ-2-1-6	PTZ CONFIGURATIONS AND PTZ NODES CONSISTENCY	New to 1.02.4 Test Specification.	
PTZ-2-1-7	PTZ CONFIGURATIONS AND PTZ CONFIGURATION OPTIONS CONSISTENCY	New to 1.02.4 Test Specification.	
PTZ-2-1-8	NVT SOAP FAULT MESSAGE	10.2.5	NVT SOAP FAULT MESSAGE
PTZ-3-1-1	NVT PTZ ABSOLUTE MOVE	10.3.1	NVT PTZ ABSOLUTE MOVE
PTZ-3-1-2	NVT SOAP FAULT MESSAGE	10.3.2	NVT SOAP FAULT MESSAGE
PTZ-3-1-3	NVT PTZ RELATIVE MOVE	10.3.3	NVT PTZ RELATIVE MOVE
PTZ-3-1-4	NVT PTZ CONTINUOUS MOVE	10.3.4	NVT PTZ CONTINUOUS MOVE
PTZ-3-1-5	NVT PTZ CONTINUOUS MOVE & STOP	10.3.5	NVT PTZ CONTINUOUS MOVE & STOP
PTZ-4-1-1	NVT SET AND GET PRESET	10.4.1	NVT SET AND GET PRESET

New ID	New Test Case Name	1.02.2 ID	1.02.2 Test Case Name
PTZ-4-1-2	NVT GOTO PRESET	10.4.2	NVT GOTO PRESET
PTZ-4-1-3	NVT REMOVE PRESET	10.4.3	NVT REMOVE PRESET
PTZ-5-1-1	NVT HOME POSITION OPERATIONS (CONFIGURABLE)	10.5.1	NVT HOME POSITION OPERATIONS (CONFIGURABLE)
PTZ-5-1-2	NVT HOME POSITION OPERATIONS (FIXED)	10.5.2	NVT HOME POSITION OPERATIONS (FIXED)
PTZ-6-1-1	NVT SEND AUXILIARY COMMAND	10.6.1	NVT SEND AUXILIARY COMMAND
PTZ-7-1-1	NVT GENERIC PAN/TILT SPACE	10.7.1.1	NVT GENERIC PAN/TILT SPACE
PTZ-7-1-2	NVT GENERIC ZOOM SPACE	10.7.1.2	NVT GENERIC ZOOM SPACE
PTZ-7-2-1	NVT GENERIC PAN/TILT TRANSLATION SPACE	10.7.2.1	NVT GENERIC PAN/TILT TRANSLATION SPACE
PTZ-7-2-2	NVT GENERIC ZOOM TRANSLATION SPACE	10.7.2.2	NVT GENERIC ZOOM TRANSLATION SPACE
PTZ-7-3-1	NVT GENERIC PAN/TILT VELOCITY SPACE	10.7.3.1	NVT GENERIC PAN/TILT VELOCITY SPACE
PTZ-7-3-2	NVT GENERIC ZOOM VELOCITY SPACE	10.7.3.2	NVT GENERIC ZOOM VELOCITY SPACE
PTZ-7-4-1	NVT GENERIC PAN/TILT SPEED SPACE	10.7.4.1	NVT GENERIC PAN/TILT SPEED SPACE
PTZ-7-4-2	NVT GENERIC ZOOM SPEED SPACE	10.7.4.2	NVT GENERIC ZOOM SPEED SPACE

## 1.8. Security Test Cases

New ID	New Test Case Name	1.02.2 ID	1.02.2 Test Case Name
SECURITY-1-1-1	USER TOKEN PROFILE	11.1	NVT USER TOKEN PROFILE

## Interpretation applied to the Test cases

The following is the list of interpretation applied to certain test cases in this Test Specification documents.

### wsnt:CurrentTime is required

According to [WS-BaseNotification] specification, wsnt:RenewResponse/wsnt:CurrentTime is defined as OPTIONAL component. However, the test case ID EVENT-2-1-4 require this field be present in the response from DUT.

This interpretation will be formally clarified in [ONVIF Core] in future.

### SDP "c=" field is required for Multicast real-time streaming test cases

In terms of the way to exchange which multicast address will be used for RTSP/RTP streaming between client and server, there is no distinct way defined as MUST in any IETF standard document that [ONVIF Core] refers to. This Test Specification adopts the approach using SDP "c=" field for the purpose of exchanging multicast

address information. For the details, please refer to Annex A.8 in [ONVIF Media Test].

This interpretation will be formally clarified in [ONVIF Core] in future.

#### **Media service USE COUNT test cases**

In terms of newly introduced test cases in [ONVIF Media Test] which handles USE COUNT field in various configuration entities, the following interpretations have been applied.

- a) UseCount field is read only parameter. There is no direct way to modify this value other than by way of AddXXXConfiguration / RemoveXXXConfiguration operations.
- b) If those configuration entities are used in media profiles, the UseCount value should be increased to indicate that changing the configuration entity may affect other users.