

ONVIF[™]

Test Specification v26.06

Release Notes

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Overview

Important:

This ONVIF Test Specification v26.06 replaces the previously released version DTT v25.12 along with all accepted errata. As of October 1st, 2026, ONVIF members shall only declare conformance of a product with ONVIF Test Specification v26.06.

- Test cases added
 - 6 test cases in Advanced Security
 - 8 test cases in Base Device
 - 1 test case in Event handling
 - 5 test cases in Real time streaming using Media2
 - 37 test cases in Recording Control
 - 2 test cases in Security Baseline
 - 7 test cases in Uplink

- Test cases modified
 - 33 test cases in Advanced Security
 - 2 test cases in Base Device
 - 5 test cases in Media2 Configuration
 - 11 test cases in Recording Control
 - 1 test case in Replay
 - 18 test cases in Real time streaming using Media2
 - 9 test cases in Uplink

- Test cases removed
 - None

Added Test Cases

The following tables list all test cases added in this version.

Advanced Security

Test Case ID	Test Case Description
ADVANCED_SECURITY-3-2-6	Basic TLS Handshake (ECC)
ADVANCED_SECURITY-3-2-7	Basic TLS Handshake after Replace Server Certificate Assignment (ECC)
ADVANCED_SECURITY-3-2-8	Basic TLS Handshake (RSA)
ADVANCED_SECURITY-4-1-3	TLS Server Certificate - self-signed (ECC)
ADVANCED_SECURITY-4-1-4	TLS Server Certificate – CA (ECC)
ADVANCED_SECURITY-11-1-1	Media Signing - Receive Provisioned Certificate

Base Device

Test Case ID	Test Case Description
DEVICE-10-1-1	Storage Configuration Management (ObjectStorageS3)
DEVICE-10-1-2	Storage Configuration Management (ObjectStorageAzure)
DEVICE-10-2-1	Storage Configuration Management - Renewal
DEVICE-10-2-2	Storage Configuration Management - Renewal with access token authentication (OAuthClientCredentials,client_secret_basic)
DEVICE-10-2-3	Storage Configuration Management - Renewal with access token authentication (OAuthClientCredentials,private_key_jwt, RS256)
DEVICE-10-2-4	Storage Configuration Management - Renewal with access token authentication (OAuthClientCredentials,private_key_jwt, ES256)
DEVICE-10-2-5	Storage Configuration Management - Renewal with access token authentication (OAuthClientCredentials,client_secret_basic) - Invalid Renewal Endpoint Certificate
DEVICE-10-2-6	Storage Configuration Management - Renewal with access token authentication (OAuthClientCredentials,client_secret_basic) - Invalid Authentication Server Certificate

Event Handling

Test Case ID	Test Case Description
EVENT-3-1-39	REALTIME PULLPOINT SUBSCRIPTION – PULLMESSAGES AS KEEP-ALIVE

Real time streaming using Media2

Test Case ID	Test Case Description
MEDIA2_RTSS-1-1-26	MEDIA2 STREAMING – Signed H.264 (provisioned certificate, RTP-Unicast/UDP)
MEDIA2_RTSS-1-1-27	MEDIA2 STREAMING – Signed H.265 (provisioned certificate, RTP-Unicast/UDP)
MEDIA2_RTSS-1-1-28	MEDIA2 STREAMING – Not signed H.264 (RTP-Unicast/UDP)
MEDIA2_RTSS-1-1-29	MEDIA2 STREAMING – Not signed H.265 (RTP-Unicast/UDP)
MEDIA2_RTSS-7-1-8	WebSocket Connection to Signaling Server with access token authentication (OAuthClientCredentials, private_key_jwt, ES256)

Recording Control

Test Case ID	Test Case Description
RECORDING-1-1-4	GET SERVICES AND GET RECORDING CONTROL SERVICE CAPABILITIES CONSISTENCY
RECORDING-2-2-1	OBJECT STORAGE RECORDING - START AND STOP RECORDING
RECORDING-2-2-2	OBJECT STORAGE RECORDING - START AND STOP RECORDING, JOB PRIORITIES
RECORDING-2-2-3	OBJECT STORAGE RECORDING - STORAGE IS NOT ACCESSIBLE
RECORDING-2-2-4	OBJECT STORAGE RECORDING - VIDEO RECORDING (H.264, MP4)
RECORDING-2-2-5	OBJECT STORAGE RECORDING - VIDEO RECORDING (H.264, CMAF)
RECORDING-2-2-6	OBJECT STORAGE RECORDING - AUDIO RECORDING (OPUS, MP4)
RECORDING-2-2-7	OBJECT STORAGE RECORDING - AUDIO RECORDING (AAC, MP4)
RECORDING-2-2-8	OBJECT STORAGE RECORDING - AUDIO RECORDING (OPUS, CMAF)
RECORDING-2-2-9	OBJECT STORAGE RECORDING - AUDIO RECORDING (AAC, CMAF)
RECORDING-2-2-10	OBJECT STORAGE RECORDING - VIDEO AND AUDIO RECORDING (H.264 + OPUS/AAC, MP4)
RECORDING-2-2-11	OBJECT STORAGE RECORDING - VIDEO AND AUDIO RECORDING (H.264 + OPUS/AAC, CMAF)
RECORDING-2-2-12	OBJECT STORAGE RECORDING - DIFFERENT STORAGES (ObjectStorageS3)
RECORDING-2-2-13	OBJECT STORAGE RECORDING - DIFFERENT STORAGES (ObjectStorageAzure)
RECORDING-2-2-14	OBJECT STORAGE RECORDING - SYMMETRIC ENCRYPTION (CENC)
RECORDING-2-2-15	OBJECT STORAGE RECORDING - ASYMMETRIC ENCRYPTION (RSA)
RECORDING-2-2-16	OBJECT STORAGE RECORDING - ASYMMETRIC ENCRYPTION (ECC)
RECORDING-2-2-17	OBJECT STORAGE RECORDING - ASYMMETRIC ENCRYPTION (key rotation)
RECORDING-2-2-18	OBJECT STORAGE RECORDING - SYMMETRIC ENCRYPTION (CENC, different track encryption)
RECORDING-2-2-19	OBJECT STORAGE RECORDING - ENCRYPTION (ambiguous configuration)
RECORDING-2-2-20	OBJECT STORAGE RECORDING - OVERRIDE SEGMENT DURATION
RECORDING-2-2-21	OBJECT STORAGE RECORDING - OVERRIDE SEGMENT DURATION (override current)

RECORDING-2-2-22	OBJECT STORAGE RECORDING - OVERRIDE SEGMENT DURATION (recording configuration update)
RECORDING-2-2-23	OBJECT STORAGE RECORDING - OVERRIDE SEGMENT DURATION (invalid expiration)
RECORDING-2-2-24	OBJECT STORAGE RECORDING - RENEWAL
RECORDING-4-1-15	RECORDING CONFIGURATION (Static Recording)
RECORDING-4-1-16	RECORDING CONFIGURATION (Dynamic Recording)
RECORDING-4-1-17	TRACK CONFIGURATION (Static Track)
RECORDING-4-1-18	TRACK CONFIGURATION (Dynamic Track)
RECORDING-4-1-19	RECORDING JOB CONFIGURATION
RECORDING-5-1-21	RECORDING CONTROL - RECORDING CONFIGURATION EVENT PROPERTIES
RECORDING-5-1-22	RECORDING CONTROL - CREATE RECORDING EVENT PROPERTIES
RECORDING-5-1-23	RECORDING CONTROL - DELETE RECORDING EVENT PROPERTIES
RECORDING-5-1-24	RECORDING CONTROL - TRACK CONFIGURATION EVENT PROPERTIES
RECORDING-5-1-25	RECORDING CONTROL - RECORDING JOB CONFIGURATION EVENT PROPERTIES
RECORDING-5-1-26	RECORDING CONTROL - RECORDING JOB STATE EVENT PROPERTIES
RECORDING-5-1-27	RECORDING CONTROL – JOB STATE EVENT

Security Baseline

Test Case ID	Test Case Description
BASELINE-1-1-1	Check Supported Capabilities
BASELINE-3-1-1	Check Upload Certificate Without Private Key

Uplink

Test Case ID	Test Case Description
UPLINK-1-1-2	Connect And Disconnect (native h2c-reverse)
UPLINK-1-2-1	Connect And Disconnect (h2c-reverse over WebSocket)
UPLINK-1-2-2	Automatic Reconnection After 30 Seconds Timeout (h2creverse over WebSocket)
UPLINK-1-2-3	Multiple Uplink Connections (h2c-reverse over WebSocket)
UPLINK-1-2-4	Services Accessibility Through Uplink Connection (h2creverse over WebSocket)
UPLINK-1-2-5	Possibility to delete configuration for open uplink connection (h2c-reverse over WebSocket)
UPLINK-2-1-2	Uplink Configuration Creation - Ambiguous Authentication

Test Cases modified

The following tables list all test cases that have been removed in this version.

Advanced Security

Test Case ID	Test Case Description
ADVANCED_SECURITY-1-1-2	Create RSA Key Pair, status through event
ADVANCED_SECURITY-1-1-7	Create ECC Key Pair, status through event
ADVANCED_SECURITY-2-1-4	Upload certificate – Keystore contains private key
ADVANCED_SECURITY-2-1-5	Upload certificate – Keystore does not contain private key
ADVANCED_SECURITY-2-1-7	Get Certificate - CA
ADVANCED_SECURITY-2-1-9	Get All Certificates – CA
ADVANCED_SECURITY-2-1-11	Delete Certificate – CA
ADVANCED_SECURITY-2-1-21	Delete Certificate – CA – Preserve Public Key
ADVANCED_SECURITY-2-1-23	Upload certificate – Upload malformed certificate
ADVANCED_SECURITY-2-1-24	Upload certificate – Upload expired certificate
ADVANCED_SECURITY-2-1-32	Upload certificate – Keystore contains private key
ADVANCED_SECURITY-2-1-33	Upload certificate – Keystore does not contain private key (ECC)
ADVANCED_SECURITY-2-1-35	Get Certificate - CA (ECC)
ADVANCED_SECURITY-2-1-37	Delete Certificate – CA – Preserve Public Key (ECC)
ADVANCED_SECURITY-2-1-39	Upload certificate – Upload malformed certificate (ECC, negative test)
ADVANCED_SECURITY-2-1-40	Upload certificate – Upload expired certificate (ECC)
ADVANCED_SECURITY-3-2-3	Basic TLS Handshake (RSA)
ADVANCED_SECURITY-3-2-5	Basic TLS Handshake with Replace Server Certification Path and PKCS#12
ADVANCED_SECURITY-3-3-3	Replace certification path validation policy assignment
ADVANCED_SECURITY-5-1-1	Security Configuration Service Capabilities
ADVANCED_SECURITY-5-1-2	Get Services and Get Security Configuration Service Capabilities Consistency
ADVANCED_SECURITY-6-2-1	Upload PKCS8 – no key pair exists
ADVANCED_SECURITY-6-2-3	Upload Encrypted PKCS8
ADVANCED_SECURITY-6-2-4	Upload Encrypted PKCS8 – Using Passphrase Management
ADVANCED_SECURITY-6-3-1	Upload PKCS12 – no key pair exists
ADVANCED_SECURITY-6-3-4	Upload PKCS12 - verify key and certificate
ADVANCED_SECURITY-6-3-5	Upload PKCS12 – Decryption Failed
ADVANCED_SECURITY-6-3-6	Upload PKCS12 – Using Passphrase Storage
ADVANCED_SECURITY-8-1-4	Create certification path validation policy
ADVANCED_SECURITY-8-1-5	Get certification path validation policy
ADVANCED_SECURITY-8-1-6	Delete certification path validation policy
ADVANCED_SECURITY-10-1-1	Authorization Server Configuration Creation
ADVANCED_SECURITY-10-1-2	Authorization Server Configuration Modification

Base Device

Test Case ID	Test Case Description
DEVICE-1-1-16	GET SERVICES – EVENT SERVICE
DEVICE-1-1-18	DEVICE SERVICE CAPABILITIES

Media2 Configuration

Test Case ID	Test Case Description
MEDIA2-1-1-4	GET PROFILES
MEDIA2-2-2-5	MODIFY ALL SUPPORTED VIDEO SOURCE CONFIGURATIONS
MEDIA2-7-1-2	GET SERVICES AND GET MEDIA2 SERVICE CAPABILITIES CONSISTENCY
MEDIA2-14-1-1	GET AND SET WEBRTC CONFIGURATIONS
MEDIA2-14-1-2	SET WEBRTC CONFIGURATIONS FAULTS

Replay

Test Case ID	Test Case Description
REPLAY-3-1-16	PLAYBACK VIDEO STREAMING - PAUSE WITH RANGE

Recording Control

Test Case ID	Test Case Description
RECORDING-2-1-20	START RECORDING ON RECEIVER
RECORDING-2-1-22	STOP RECORDING ON RECEIVER - PUT JOB IN IDLE STATE
RECORDING-2-1-23	STOP RECORDING ON RECEIVER - NEVER CONNECTED MODE
RECORDING-2-1-25	STOP RECORDING ON RECEIVER - DELETE JOB
RECORDING-2-1-27	MODIFY MEDIA ATTRIBUTE WHILE RECORDING - RECEIVER
RECORDING-2-1-28	START RECORDING ON MEDIA PROFILE
RECORDING-2-1-29	STOP RECORDING ON MEDIA PROFILE - PUT JOB IN IDLE STATE
RECORDING-3-1-11	RECORDING JOB CONFIGURATION - DIFFERENT PRIORITIES (ON MEDIA PROFILE)
RECORDING-3-1-12	RECORDING JOB CONFIGURATION - DIFFERENT PRIORITIES (ON RECEIVER)
RECORDING-4-1-14	GET RECORDING JOB STATE WITH INVALID TOKEN
RECORDING-5-1-19	RECORDING CONTROL – JOB STATE CHANGE EVENT

Real time streaming using Media2

Test Case ID	Test Case Description
MEDIA2_RTSS-1-3-1	MEDIA2 STREAMING – H.264 (WebRTC, Default Profile)
MEDIA2_RTSS-1-3-2	VIDEO ENCODER INSTANCES (WebRTC, Non-Default Profile)
MEDIA2_RTSS-1-3-3	VIDEO ENCODER INSTANCES - H.264 (WebRTC, Non-Default Profile)
MEDIA2_RTSS-1-3-4	MEDIA2 STREAMING – H.264 (WebRTC, FIR and PLI)
MEDIA2_RTSS-2-3-1	MEDIA2 AUDIO STREAMING – G.711 (WebRTC, Default Profile)
MEDIA2_RTSS-2-3-2	MEDIA2 AUDIO STREAMING – OPUS (WebRTC, Default Profile)
MEDIA2_RTSS-3-3-1	MEDIA2 STREAMING – BACKCHANNEL G.711 (WebRTC, Default Profile)
MEDIA2_RTSS-3-3-2	MEDIA2 STREAMING – BACKCHANNEL OPUS (WebRTC, Default Profile)
MEDIA2_RTSS-5-3-1	MEDIA2 STREAMING – H.26X/G.711 (WebRTC, Default Profile)
MEDIA2_RTSS-5-3-2	MEDIA2 STREAMING – H.26X/OPUS (WebRTC, Default Profile)
MEDIA2_RTSS-7-1-1	MEDIA2 STREAMING – WebRTC Connection Management
MEDIA2_RTSS-7-1-2	MEDIA2 STREAMING – WebRTC Signaling Server Error Response
MEDIA2_RTSS-7-1-3	MEDIA2 STREAMING – Device Capabilities and WebRTC Session Extension
MEDIA2_RTSS-7-1-4	WebSocket Connection to Signaling Server with access token authentication (OAuthClientCredentials, client_secret_basic)
MEDIA2_RTSS-7-1-5	WebSocket Connection to Signaling Server with access token authentication (OAuthClientCredentials, private_key_jwt)
MEDIA2_RTSS-7-1-6	WebSocket Connection to Signaling Server with access token authentication (OAuthClientCredentials, client_secret_basic) - Invalid Signaling Server Certificate
MEDIA2_RTSS-7-1-7	WebSocket Connection to Signaling Server with access token authentication (OAuthClientCredentials, client_secret_basic) - Invalid Authentication Server Certificate
MEDIA2_RTSS-7-1-8	WebSocket Connection to Signaling Server with access token authentication (OAuthClientCredentials, private_key_jwt, ES256)

Uplink

Test Case ID	Test Case Description
UPLINK-2-1-1	Uplink Configuration Management
UPLINK-3-1-1	Uplink over WebSocket with mTLS Authentication
UPLINK-3-1-2	Uplink over WebSocket with access token authentication (OAuthClientCredentials, client_secret_basic)
UPLINK-3-1-3	Uplink over WebSocket with access token authentication (OAuthClientCredentials, private_key_jwt, RS256)
UPLINK-3-1-4	Uplink over WebSocket with mTLS Authentication - Invalid Server Certificate
UPLINK-3-1-5	Uplink over WebSocket with access token authentication (OAuthClientCredentials, client_secret_basic) - Invalid Uplink Client Certificate
UPLINK-3-1-6	Uplink over WebSocket with access token authentication (OAuthClientCredentials, client_secret_basic) – Invalid Authentication Server Certificate
UPLINK-3-1-7	Uplink over WebSocket with access token authentication (OAuthClientCredentials, private_key_jwt, ES256)
UPLINK-4-1-1	GET SERVICES AND GET UPLINK SERVICE CAPABILITIES CONSISTENCY

List of Device Test Specification Documents v26.06

Document	Release Date
ONVIF_Access_Control_Device_Test_Specification_21.06.pdf	Jun-21
ONVIF_Access_Policy_Device_Test_Specification_21.12.pdf*	Dec-21
ONVIF_Access_Rules_Device_Test_Specification_20.06.pdf	Jun-20
ONVIF_Add-ons_Conformance_Device_Test_Specification_26.06.pdf	Jun-26
ONVIF_Analytics_Engine_Device_Test_Specification_24.06.pdf	Jun-24
ONVIF_Base_Device_Test_Specification_26.06.pdf	Jun-26
ONVIF_Credential_Device_Test_Specification_20.12.pdf	Dec-20
ONVIF_DeviceIO_Device_Test_Specification_20.06.pdf	Jun-20
ONVIF_Device_Feature_Discovery_Specification_26.06.pdf	Jun-26
ONVIF_Door_Control_Device_Test_Specification_21.06.pdf	Jun-21
ONVIF_Event_Handling_Device_Test_Specification_26.06.pdf	Jun-26
ONVIF_Export_File_Format_Device_Test_Specification_21.06.pdf*	Jun-21
ONVIF_Imaging_Device_Test_Specification_20.06.pdf	Jun-20
ONVIF_Media2_Configuration_Device_Test_Specification_26.06.pdf	Jun-26
ONVIF_Media_Configuration_Device_Test_Specification_24.06.pdf	Jun-24
ONVIF_Profiles_Conformance_Device_Test_Specification_26.06.pdf	Jun-26
ONVIF_PTZ_Device_Test_Specification_24.12.pdf	Dec-24
ONVIF_Real_Time_Streaming_Device_Test_Specification_24.12.pdf	Dec-24
ONVIF_Real_Time_Streaming_using_Media2_Device_Test_Specification_26.06.pdf	Jun-26
ONVIF_Receiver_Device_Test_Specification_20.06.pdf	Jun-20
ONVIF_Recording_Control_Device_Test_Specification_26.06.pdf	Jun-26
ONVIF_Recording_Search_Device_Test_Specification_20.06.pdf	Jun-20
ONVIF_Replay_Control_Device_Test_Specification_19.12.pdf	Dec-19
ONVIF_Security_Configuration_Device_Test_Specification_26.06.pdf	Jun-26
ONVIF_Schedule_Device_Test_Specification_20.06.pdf	Jun-20
ONVIF_Security_Baseline_Test_Specification_26.06.pdf	Jun-26
ONVIF_Thermal_Device_Test_Specification_18.06.pdf	Jun-18
ONVIF_Uplink_Device_Test_Specification_26.06.pdf	Jun-26

****Draft specification, subject to change.***