

ONVIF Conformance Test

Performed by

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Device Under Test

Brand - Brickcom Model - VS-01Ae Serial Number - AAHA01B00279 Firmware Version - v3.0.7.2 Other -

ONVIF Test Tool version 1.01.1.26 ONVIF Test Specification version 1.01, September 2009 ONVIF Core Specification version 1.01, July 2009

Test Date and Time - Test date - 2010/9/8 @ 11:54:15

ONVIF Test Summary

Test Count: 45 Manditory Tests Skipped: 0 Optional Tests Skipped: 0 Tests Executed: 45 Tests Passed: 45 Tests Failed: 0

ONVIF Tests

Device Discovery Test Cases

8.1.1 - MULTICAST NVT HELLO MESSAGE
Test Results
Step 1 - Transmit SystemReboot message
Step Passed
Step 2 - Receive SystemRebootResponse message
Response Message validated
Response Message received - Rebooting in 3 seconds
Step Passed
Step 3 - Receive multicast HELLO Message
Multicast Hello Message received
Step Passed
Test complete

8.1.2 - MULTICAST NVT HELLO MESSAGE VALIDATION

Test Results Step 1 - Transmit SystemReboot message Step Passed Step 2 - Receive SystemRebootResponse message Response Message validated Response Message received - Rebooting in 3 seconds Step Passed Step 3 - Receive multicast HELLO message Multicast Hello Message received Step Passed Step 4 - Verify HELLO message Multicast Hello Message validated Step Passed Test complete Test PASSED

8.1.3 - MULTICAST NVT SEARCH BASED ON DEVICE SCOPE TYPES

Test Results

Step 1 - Transmit GetScopesRequest message Step Passed Step 2 - Receive GetScopesResponse message Get Scopes Response Message validated Device Scope found - onvif://www.onvif.org/name/VS-01Ae Device Scope found - onvif://www.onvif.org/type/video encoder Device Scope found - onvif://www.onvif.org/type/audio encoder Device Scope found - onvif://www.onvif.org/hardware/G-version Device Scope found - onvif://www.onvif.org/location/Taiwan Device Scope found - onvif://www.onvif.org/type/Taiwan Step Passed Step 3.1 - Transmit multicast PROBE message Scope Item = onvif://www.onvif.org/name/VS-01Ae Step 4.1 - Receive PROBE MATCH message Get Scopes Response Message validated Step 3.2 - Transmit multicast PROBE message Scope Item = onvif://www.onvif.org/type/video_encoder Step 4.2 - Receive PROBE MATCH message Get Scopes Response Message validated Step 3.3 - Transmit multicast PROBE message Scope Item = onvif://www.onvif.org/type/audio_encoder Step 4.3 - Receive PROBE MATCH message Get Scopes Response Message validated Step 3.4 - Transmit multicast PROBE message Scope Item = onvif://www.onvif.org/hardware/G-version Step 4.4 - Receive PROBE MATCH message Get Scopes Response Message validated Step 3.5 - Transmit multicast PROBE message Scope Item = onvif://www.onvif.org/location/Taiwan Step 4.5 - Receive PROBE MATCH message Get Scopes Response Message validated Step 3.6 - Transmit multicast PROBE message Scope Item = onvif://www.onvif.org/type/Taiwan

Step 4.6 - Receive PROBE MATCH message Get Scopes Response Message validated Step Passed Test complete Test PASSED

8.1.3.1 - NVT SEARCH WITH OMITTED DEVICE AND SCOPE TYPES
Test Results
Step 1 - Transmit multicast PROBE message
Device and scope types are empty
Step Passed
Step 2 - Receive unicast PROBE MATCH message
Get Scopes Response Message validated
Step Passed
Test complete
Test PASSED

8.1.3.2 - NVT RESPONSE TO INVALID SEARCH REQUEST

Test Results

Step 1 - Transmit multicast PROBE message with invalid device and scope types POST returned a SOAP error - - uuid:e93fdbc9-0a41-4989-8e6f-6bb296b092a7uuid:e93fdbc9-0a41-4989-8e6f-6bb296b092a7urn:schemas-xmlsoaporg:ws:2005:04:discoveryhttp://schemas.xmlsoap.org/ws/2005/04/discovery/ProbeSOAP-ENV:Sender to invalid Probe message Step Passed

Test complete

Test PASSED

8.1.4 - UNICAST NVT SEARCH BASED ON DEVICE SCOPE TYPES Test Results

Step 1 - Transmit GetScopesRequest message Step Passed Step 2 - Receive GetScopesResponse message Get Scopes Response Message validated Device Scope found - onvif://www.onvif.org/name/VS-01Ae Device Scope found - onvif://www.onvif.org/type/video encoder Device Scope found - onvif://www.onvif.org/type/audio_encoder Device Scope found - onvif://www.onvif.org/hardware/G-version Device Scope found - onvif://www.onvif.org/location/Taiwan Device Scope found - onvif://www.onvif.org/type/Taiwan Step Passed Step 3.1 - Transmit unicast PROBE message Scope Item = onvif://www.onvif.org/name/VS-01Ae Step 4.1 - Receive PROBE MATCH message Get Scopes Response Message validated Step 3.2 - Transmit unicast PROBE message Scope Item = onvif://www.onvif.org/type/video_encoder Step 4.2 - Receive PROBE MATCH message Get Scopes Response Message validated Step 3.3 - Transmit unicast PROBE message Scope Item = onvif://www.onvif.org/type/audio_encoder Step 4.3 - Receive PROBE MATCH message Get Scopes Response Message validated Step 3.4 - Transmit unicast PROBE message Scope Item = onvif://www.onvif.org/hardware/G-version Step 4.4 - Receive PROBE MATCH message Get Scopes Response Message validated Step 3.5 - Transmit unicast PROBE message Scope Item = onvif://www.onvif.org/location/Taiwan Step 4.5 - Receive PROBE MATCH message Get Scopes Response Message validated Step 3.6 - Transmit unicast PROBE message Scope Item = onvif://www.onvif.org/type/Taiwan Step 4.6 - Receive PROBE MATCH message Get Scopes Response Message validated Step Passed Test complete Test PASSED

8.1.4.1 - UNICAST NVT SEARCH WITH OMITTED DEVICE AND SCOPE TYPES

Test Results

Step 1 - Transmit unicast PROBE message

Device and scope types are empty

Step Passed

Step 2 - Receive unicast PROBE MATCH message

Get Scopes Response Message validated

Step Passed

Test complete

Test PASSED

8.1.4.2 - UNICAST NVT RESPONSE TO INVALID SEARCH REQUEST

Test Results

Step 1 - Transmit unicast PROBE message with invalid device and scope types Step Passed

Step 2 - Verify device does not send PROBE MATCH message

POST returned a SOAP error - - uuid:952604b8-d842-4780-ad24-

9328cb8f34f3uuid:952604b8-d842-4780-ad24-9328cb8f34f3urn:schemas-xmlsoap-

org:ws:2005:04:discoveryhttp://schemas.xmlsoap.org/ws/2005/04/discovery/ProbeSOAP-

ENV:Sender

to invalid Probe message

Step Passed

Test complete

Test PASSED

8.1.5 - NVT DEVICE SCOPES CONFIGURATION

Test Results

Step 1 - Transmit GetScopesRequest message

Step Passed

Step 2 - Receive GetScopesResponse message

Get Scopes Response Message validated

Device Scope found - onvif://www.onvif.org/name/VS-01Ae Device Scope found - onvif://www.onvif.org/type/video_encoder Device Scope found - onvif://www.onvif.org/type/audio encoder Device Scope found - onvif://www.onvif.org/hardware/G-version Device Scope found - onvif://www.onvif.org/location/Taiwan Device Scope found - onvif://www.onvif.org/type/Taiwan Step Passed Step 3 - Transmit SetScopesRequest message of a fixed scope type Step Passed Step 4 - Receive SOAP 1.2 fault response, Operation Prohibited/Scope Overwrite POST returned a SOAP error - fixed scope types cannot be overwritten env:Senderter:OperationProhibitedter:ScopeOverwritefixed scope types cannot be overwritten as required Step Passed Step 5 - Transmit AddScopesRequest message List of new scopes types Adding new scope - onvif://www.onvif.org/name/TEMP_SCOPE_VALUE Step Passed Step 6 - Receive AddScopesResponse message Add Scopes Response Message validated Step Passed Step 7 - Receive multicast HELLO message Multicast Hello Message validated Multicast Hello Message contained new scope onvif://www.onvif.org/name/TEMP_SCOPE_VALUE Step Passed Step 8 - Transmit unicast PROBE message New scopes types = onvif://www.onvif.org/name/TEMP_SCOPE_VALUE Step Passed Step 9 - Receive unicast PROBE MATCH message Get Scopes Response Message validated Step Passed Step 10 - Transmit DeleteScopesRequest message New scopes types = onvif://www.onvif.org/name/TEMP_SCOPE_VALUE Step Passed Step 11 - Receive DeleteScopesResponse message List of scopes types deleted Remove Scopes Response Message validated

> Device - VS-01Ae Test date - 2010/9/8 @ 11:54:15 ONVIF Test Report Page: 8

Step Passed Step 12 - Receive multicast HELLO message Multicast Hello Message validated Step Passed Step 13 - Transmit unicast PROBE message New scopes types = onvif://www.onvif.org/name/TEMP_SCOPE_VALUE Step Passed Step 14 - Verify device does not send PROBE MATCH message Unit did not send PROBE MATCH message. Temporary scope has been deleted successfully Step Passed Test complete Test PASSED

8.1.6 - NVT BYE MESSAGE

Test Results

Step 1 - Transmit SystemReboot message

Step Passed

Step 2 - Receive SystemRebootResponse message

Response Message validated

Response Message received - Rebooting in 3 seconds

Step Passed

Step 3 - Receive multicast BYE message

Response Message validated

Step Passed

Prepare to pause for "User defined boot time" 70000 ms

Step Passed

Pause done, resuming test

Step Passed

Test complete

Test PASSED

8.1.7 - NVT DISCOVERY SOAP FAULT*

*Optional Test

Test Results

Step 1 - Transmit unicast PROBE message

Step Passed

Step 2 - Receive SOAP 1.2 fault response

POST returned a SOAP error - the matching rule specified is not supported - uuid:1ca7b43c-58a1-4008-8b4b-63854ae5b15buuid:1ca7b43c-58a1-4008-8b4b-63854ae5b15burn:schemasxmlsoap-org:ws:2005:04:discoveryhttp://schemas.xmlsoap.org/ws/2005/04/discovery/faultSOAP-ENV:Senderd:MatchingRuleNotSupportedthe matching rule specified is not supported

as required Step Passed Test complete Test PASSED

Device Management Test Cases

8.2.1 - NVT WSDL URL

Test Results

```
Step 1 - Transmit GetWsdlUrlRequest message
Step Passed
Step 2 - Receive GetWsdlUrlResponse message
Message validated
WSDL URL = http://10.5.151.52:80/onvif/device_service
Step Passed
Test complete
```

Test PASSED

8.2.2 - NVT ALL CAPABILITIES

Test Results

Step 1 - Transmit GetCapabilitiesRequest message CapabilityCategory = "ALL"

Step Passed

Step 2 - Receive GetCapabilitiesResponse message

Message validated

All required capabilities found

Step Passed Test complete Test PASSED

8.2.3 - NVT DEVICE CAPABILITIES

Test Results Step 1 - Transmit GetCapabilitiesRequest message CapabilityCategory = "DEVICE" Step Passed Step 2 - Receive GetCapabilitiesResponse message Device capabilities Message validated Device supports ONVIF version 2.0 All required capabilities found Step Passed Test complete Test PASSED

8.2.4 - NVT MEDIA CAPABILITIES

Test Results Step 1 - Transmit GetCapabilitiesRequest message CapabilityCategory = "MEDIA" Step Passed Step 2 - Receive GetCapabilitiesResponse message Media capabilities Message validated All required capabilities found Step Passed Test complete Test PASSED 8.2.5 - NVT SERVICE CATEGORY CAPABILITIES

Test Results Step 1 - Transmit GetCapabilitiesRequest message CapabilityCategory = "ANALYTICS" Step Passed Step 2 - Receive GetCapabilitiesResponse or SOAP 1.2 fault response Depending on device capabilities Message validated Analytics capabilities found Step Passed Step 3 - Transmit GetCapabilitiesRequest message CapabilityCategory = "EVENTS" Step Passed Step 4 - Receive GetCapabilitiesResponse or SOAP 1.2 fault response Depending on device capabilities Message validated Events capabilities found Step Passed Step 5 - Transmit GetCapabilitiesRequest message CapabilityCategory = "IMAGING" Step Passed Step 6 - Receive GetCapabilitiesResponse or SOAP 1.2 fault response Depending on device capabilities Message validated Imaging capabilities found Step Passed Step 7 - Transmit GetCapabilitiesRequest message CapabilityCategory = "PTZ" Step Passed Step 8 - Receive GetCapabilitiesResponse or SOAP 1.2 fault response Depending on device capabilities Message validated Step Passed Test complete **Test PASSED**

8.2.6 - NVT DEVICE SOAP FAULT

Test Results

Step 1 - Transmit GetCapabilitiesRequest message

CapabilityCategory = "XYZ"

Step Passed

Step 2 - Receive SOAP 1.2 fault response

POST returned a SOAP error - Validation constraint violation: data type mismatch in element 'tds:Category' - SOAP-ENV:SenderValidation constraint violation: data type mismatch in element 'tds:Category'

- as required
- Step Passed
- Test complete

Test PASSED

8.2.7 - NVT NETWORK COMMAND HOSTNAME CONFIGURATION

Test Results

Step 1 - Transmit GetHostnameRequest message Step Passed Step 2 - Receive GetHostnameResponse message FromDHCP = true/false, Name = <hostname> Message validated HostnameInformation, from DHCP = False HostnameInformation, Name = localhost.localdomain Step Passed Test complete Test PASSED

8.2.7.1 - NVT NETWORK COMMAND SET HOSTNAME TEST

Test Results

Step 1 - Transmit SetHostnameRequest message

Set Hostname ="Test"

Step Passed

Step 2 - Receive SetHostnameResponse message

Message validated Step Passed Step 3 - Transmit GetHostnameRequest message Step Passed Step 4 - Receive GetHostnameResponse message Message validated HostnameInformation, from DHCP = False HostnameInformation, Name set to = Test Step Passed Test complete Test PASSED

8.2.7.2 - NVT NETWORK COMMAND SET INVALID HOSTNAME TEST **Test Results** Step 1 - Transmit SetHostnameRequest message Name="Test#\$%" Step Passed Step 2 - Receive SOAP 1.2 fault message POST returned a SOAP error - InvalidHostname - SOAP-ENV:SenderInvalidArgValInvalidHostname as required Step Passed Step 3 - Transmit GetHostnameRequest message Step Passed Step 4 - Receive GetHostnameResponse message Message validated HostnameInformation, from DHCP = False HostnameInformation, Name = Test Step Passed Test complete **Test PASSED**

8.2.8 - NVT NETWORK COMMAND DNS CONFIGURATION

Test Results Step 1 - Transmit GetDNSRequest message Step Passed Step 2 - Receive GetDNSResponse message Message validated DNSInformation received Step Passed Test complete Test PASSED

8.2.8.1 - NVT NETWORK COMMAND SET DNS TEST **Test Results** Step 1 - Transmit SetDNSRequest message Step Passed Step 2 - Receive SetDNSResponse message Message validated SetDNSResponse received Step Passed Step 3 - Transmit GetDNSRequest message Step Passed Step 4 - Receive GetDNSResponse message Message validated **DNSInformation received** Step Passed Test complete **Test PASSED**

8.2.8.2 - NVT NETWORK COMMAND SET INVALID DNS TEST
Test Results
Step 1 - Transmit SetDNSRequest message
DNSManual=Invalid Server Address
Step Passed
Step 2 - Receive SOAP 1.2 fault message
POST returned a SOAP error - InvalidIPv4Address - SOAP-

Device - VS-01Ae Test date - 2010/9/8 @ 11:54:15 ONVIF Test Report Page: 15 ENV:SenderInvalidArgValInvalidIPv4Address as required Step Passed Step 3 - Transmit GetDNSRequest message Step Passed Step 4 - Receive GetDNSResponse message Message validated DNSInformation received Step Passed Test complete Test PASSED

8.2.9 - NVT NETWORK COMMAND NTP CONFIGURATION

Test Results

Step 1 - Transmit GetNTPRequest message Step Passed Step 2 - Receive GetNTPResponse message Message validated NTPInformation received Step Passed Test complete Test PASSED

8.2.9.1 - NVT NETWORK COMMAND SET NTP TEST

Test Results

Step 1 - Transmit SetNTPRequest message, Type = IPv4

Step Passed

Step 2 - Receive SetNTPResponse message

Message validated

SetNTPResponse received

Step Passed

Step 3 - Transmit GetNTPRequest message

Step Passed

Step 4 - Receive GetNTPResponse message

Message validated NTPInformation received Step Passed Test complete Test PASSED

8.2.9.2 - NVT NETWORK COMMAND SET INVALID IP NTP TEST **Test Results** Step 1 - Transmit SetNTPRequest message Step Passed Step 2 - Receive SOAP 1.2 fault message POST returned a SOAP error - The suggested IPv4 address is invalid env:Senderter:InvalidArgValter:InvalidIPv4AddressThe suggested IPv4 address is invalid as required Step Passed Step 3 - Transmit GetNTPRequest message Step Passed Step 4 - Receive GetNTPResponse message Message validated NTPInformation received NTPInformation IPv4Address was NOT incorrectly set Step Passed Test complete Test PASSED

8.2.10 - NVT SYSTEM COMMAND DEVICE INFORMATION

Test Results

Step 1 - Transmit GetDeviceInformationRequest message Step Passed Step 2 - Receive GetDeviceInformationResponse message Message validated Manufacturer - Brickcom Corporation Model - VS-01Ae

FirmwareVersion - v3.0.7.2

SerialNumber - 0000001 HardwareId - TW9910 Device Information Valid Step Passed Test complete Test PASSED

8.2.11 - NVT SYSTEM COMMAND SYSTEM DATE AND TIME

Test Results Step 1 - Transmit GetSystemDateAndTimeRequest message Step Passed Step 2 - Receive GetSystemDateAndTimeResponse message Message validated System Date And Time Valid Step Passed Test complete Test PASSED

8.2.11.1 - NVT SYSTEM COMMAND SET SYSTEM DATE AND TIME TEST

Test Results

Step 1 - Transmit SetSystemDateAndTimeRequest message Step Passed Step 2 - Receive SetSystemDateAndTimeResponse message

Message validated

Step Passed

Step 3 - Transmit GetSystemDateAndTimeRequest message

Step Passed

Step 4 - Receive GetSystemDateAndTimeResponse message

Message validated

System Date was set corectly

Step Passed

Test complete

Test PASSED

8.2.11.2 - NVT SYSTEM COMMAND SET SYSTEM DATE AND TIME INVALID TIMEZONE TEST **Test Results** Step 1 - Transmit SetSystemDateAndTimeRequest message DateTimeType="Manual", DayLightSavings=true, Timezone=INVALID, UTCDateTime=Hour:Min:Sec, Year:Month:Day Step Passed Step 2 - Receive SOAP 1.2 fault message POST returned a SOAP error - ter:InvalidTimeZone - SOAP-ENV:Senderter:InvalidArgValter:InvalidTimeZone as required Step Passed Step 3 - Transmit GetSystemDateAndTimeRequest message Step Passed Step 4 - Receive GetSystemDateAndTimeResponse message Message validated System Date And Time Valid Step Passed Test complete Test PASSED

8.2.11.3 - NVT SYSTEM COMMAND SET SYSTEM DATE AND TIME INVALID DATE TEST
Test Results
Step 1 - Transmit SetSystemDateAndTimeRequest message
DateTimeType="Manual", DayLightSavings=true, Timezone=POSIX 1003.1,
UTCDateTime=INVALID
Step Passed
Step 2 - Receive SOAP 1.2 fault message
POST returned a SOAP error - ter:InvalidDateTime - SOAPENV:Senderter:InvalidArgValter:InvalidDateTime
as required
Step Passed
Step 3 - Transmit GetSystemDateAndTimeRequest message
Step Passed

Step 4 - Receive GetSystemDateAndTimeResponse message Message validated System Date And Time Valid Step Passed Test complete

Test PASSED

8.2.12 - NVT SYSTEM COMMAND FACTORY DEFAULT

Test Results Step 1 - Transmit SetSystemFactoryDefaultRequest message FactoryDefaultType = "Hard" Step Passed Step 2 - Receive SetSystemFactoryDefaultResponse message Message validated

Step Passed Step 3 - Receive multicast HELLO message

Message validated

Step Passed

Test complete

Test PASSED

8.2.12.1 - NVT SYSTEM COMMAND FACTORY DEFAULT SOFT

Test Results

Step 1 - Transmit SetSystemFactoryDefaultRequest message

FactoryDefaultType = "Soft"

Step Passed

Step 2 - Receive SetSystemFactoryDefaultResponse message

Message validated

Step Passed

Step 3 - Pause for "User defined boot time"

Step Passed

Step 4 - Transmit unicast PROBE message

Retransmit 10 times a second until a response is received or timeout

Sending Probe Request 1 - Received response

Step Passed

Step 5 - Receive PROBE MATCH message

Get Scopes Response Message validated

Step Passed

Test complete

Test PASSED

8.2.13 - NVT SYSTEM COMMAND RESET

Test Results Step 1 - Transmit SystemReboot message Step Passed Step 2 - Receive SystemRebootResponse message **Response Message validated** Response Message received - Rebooting in 3 seconds Step Passed Step 3 - Receive multicast HELLO message Message validated Step Passed Step 3 - Transmit unicast PROBE message Step Passed Step 4 - Receive PROBE MATCH message Get Scopes Response Message validated Step Passed Test complete **Test PASSED**

Media Configuration Test Cases

8.3.1 - NVT MEDIA PROFILE CONFIGURATION

Test Results

Step 1 - Transmit GetProfilesRequest message Step Passed Step 2 - Receive GetProfilesResponse message

Message validated

Existing media profiles Profile found = MediaProfile1 Token = CHANNEL1 Profile found = MediaProfile2 Token = CHANNEL2 Step Passed Test complete Test PASSED

8.3.2 - NVT DYNAMIC MEDIA PROFILE CONFIGURATION

Test Results

Step 1 - Transmit GetProfilesRequest message

Step Passed

Step 2 - Receive GetProfilesResponse message

Message validated

Existing media profiles

Profile found = MediaProfile1

Video Source Configuration Token found = Profile1

Video Encoder Configuration Token found = Profile1

Step Passed

Step 3 - Transmit CreateProfilesRequest message

Name = "testprofile45"

Step Passed

Step 4 - Receive CreateProfilesResponse message

Message validated

Create profile response

Profile testprofile45

Profile token testprofile45

Profile token correct

Step Passed

Step 5 - Transmit AddVideoSourceConfigurationRequest message

Step Passed

Step 6 - Receive AddVideoSourceConfigurationResponse message Message validated

Step Passed

Step 7 - Transmit AddVideoEncoderConfigurationRequest message

Device - VS-01Ae Test date - 2010/9/8 @ 11:54:15 ONVIF Test Report Page: 22 Step Passed

Step 8 - Receive AddVideoEncoderConfigurationResponse message

Message validated

Step Passed

Step 9 - Transmit GetProfileRequest message

Step Passed

Step 10 - Receive GetProfileResponse message

Message validated

Temporary profile found

Step Passed

Step 11 - Transmit RemoveVideoEncoderConfigurationRequest message Step Passed

Step 12 - Receive RemoveVideoEncoderConfigurationResponse message Message validated

Step Passed

Step 13 - Transmit RemoveVideoSourceConfigurationRequest message

Step Passed

Step 14 - Receive RemoveVideoSourceConfigurationResponse message

Message validated

Step Passed

Step 15 - Transmit DeleteProfilesRequest message

Step Passed

Step 16 - Receive DeleteProfilesResponse message

Message validated

Step Passed

Step 17 - Transmit GetProfilesRequest message

Step Passed

Step 18 - Receive SOAP 1.2 fault message

POST returned a SOAP error - The requested profile token testprofile45 does not exist. -

SOAP-ENV:Senderter:InvalidArgValThe requested profile token testprofile45 does not exist.

as required

Step Passed

Test complete

Test PASSED

8.3.3 - NVT JPEG VIDEO ENCODER CONFIGURATION

Test Results

Step 1 - Transmit GetProfilesRequest message

Step Passed

Step 2 - Receive GetProfilesResponse message

Message validated

Existing media profiles

Profile found = Profile1

Token = Profile1

Profile found = Profile2

Token = Profile2

Step Passed

Step 3 - Transmit GetVideoEncoderConfigurationRequest message

Step Passed

Step 4 - Receive GetVideoEncoderConfigurationResponse message

Message validated

Video Encoder Configuration - Profile1

Configuration token - Profile1

Configuration encoding - H264

Step Passed

Step 5 - Transmit SetVideoEncoderConfigurationRequest message

JPEG Video Encoder Configuration, force persistence = false Step Passed

Step 6 - Receive SetVideoEncoderConfigurationResponse message Message validated

Step Passed

Step 7 - Transmit GetVideoEncoderConfigurationRequest message Step Passed

Step 8 - Receive GetVideoEncoderConfigurationResponse message Message validated

Step Passed

Test complete

Test PASSED

8.3.4 - NVT MEDIA STREAM URI – RTP/UDP UNICAST TRANSPORT

Test Results Step 1 - Transmit GetProfilesRequest message Step Passed Step 2 - Receive GetProfilesResponse message Message validated Existing media profiles Profile found = Profile1 Token = Profile1 Step Passed Step 3 - Transmit SetVideoEncoderConfigurationRequest message JPEG Video Encoder Configuration, force persistence = false Step Passed Step 4 - Receive SetVideoEncoderConfigurationResponse message Message validated Step Passed Step 5 - Transmit GetStreamUriRequest message Profile token, RTP-Unicast, UDP Step Passed Step 6 - Receive GetStreamUriResponse message Message validated Stream URI = rtsp://10.5.151.52/channel1 Step Passed Test complete Test PASSED

8.3.5 - NVT MEDIA STREAM URI – RTP/RTSP/HTTP TRANSPORT
Test Results
Step 1 - Transmit GetProfilesRequest message
Step Passed
Step 2 - Receive GetProfilesResponse message
Message validated
Existing media profiles
Profile found = Profile1
Token = Profile1
Step Passed
Step 3 - Transmit SetVideoEncoderConfigurationRequest message

JPEG Video Encoder Configuration, force persistence = false Step Passed Step 4 - Receive SetVideoEncoderConfigurationResponse message Message validated Step Passed Step 5 - Transmit GetStreamUriRequest message Profile token, RTP-Unicast, HTTP Step Passed Step 6 - Receive GetStreamUriResponse message Message validated Stream URI = http://10.5.151.52:80/stream/bidirect/channel1 Step Passed Test complete Test PASSED

8.3.6 - NVT MEDIA SOAP FAULT

Test Results

Step 1 - Transmit GetStreamUriRequest message INVALID PROFILE, RTP-Unicast, UDP

Step Passed

Step 2 - Receive SOAP 1.2 fault message

POST returned a SOAP error - The media profile does not exist. - SOAP-

ENV:Senderter:InvalidArgValThe media profile does not exist.

as required

Step Passed

Test complete

Test PASSED

8.3.6.1 - NVT INVALID TRANSPORT SOAP FAULT MESSAGE

Test Results

Step 0 - (Pre test) Send GetProfilesRequest message for valid Profile Token

Message validated

Existing media profiles

Profile found = MediaProfile1

Token = CHANNEL1 Profile found = MediaProfile2 Token = CHANNEL2 Step Passed Step 1 - Transmit GetStreamUriRequest message Profile token, RTP-Unicast, RTP Step Passed Step 2 - Receive SOAP 1.2 fault message POST returned a SOAP error - Validation constraint violation: data type mismatch in element 'tt:Protocol' - SOAP-ENV:SenderValidation constraint violation: data type mismatch in element 'tt:Protocol' as required Step Passed Test complete Test PASSED

Real Time Viewing Test Cases

8.4.1 - NVT MEDIA CONTROL - RTSP/TCP

Test Results

Step 1 - Setup NVT Media Stream URI - RTP/UDP Unicast transport

Send "Get Profiles Request"

Video Encoder Configuration found

Using profile "MediaProfile1" token = "CHANNEL1"

Send "Set Video Encoder Configuration Request"

Send "Get Stream Uri Request"

Stream URI = rtsp://10.5.151.52/channel1

Opening the video window

Step Passed

Step 2 - Send RTSP OPTIONS

RTSP Option Methods = DATE - Wed, Sep 08 2010 11

RTSP Option Methods = PUBLIC - OPTIONS, DESCRIBE, SETUP, TEARDOWN, PLAY,

PAUSE, SET_PARAMETER

Step Passed

Step 3 - Validate RTSP OPTIONS response

Step Passed

Step 4 - Send RTSP DESCRIBE

RTSP Describe context = v=0, o=- 94112091 1 IN IP4 10.5.151.52, s=Session streamed by stream, i=1, t=0 0, a=tool:LIVE555 Streaming Media v2009.01.26, a=type:broadcast, a=control:*, a=range:npt=0-, a=x-qt-text-nam:Session streamed by stream, a=x-qt-text-inf:1, m=video 0 RTP/AVP 26, c=IN IP4 0.0.0.0, b=AS:2362, a=framerate:25.0, a=control:track1 RTSP Describe options = DATE - Wed, Sep 08 2010 11 RTSP Describe options = CONTENT-TYPE - application/sdp RTSP Describe options = CONTENT-BASE - rtsp RTSP Describe options = CONTENT-LENGTH - 323 Step Passed Step 5 - Validate RTSP DESCRIBE response Step Passed Step 6 - Send RTSP SETUP RTSP Setup Session ID = 2RTSP Setup Timeout = 30 RTSP Setup Transport = DESTINATION - 10.5.151.11 RTSP Setup Transport = RTP/AVP RTSP Setup Transport = CLIENT PORT - 40000-40001 RTSP Setup Transport = UNICAST RTSP Setup Transport = SOURCE - 10.5.151.52 RTSP Setup Transport = SERVER_PORT - 6970-6971 Step Passed Step 7 - Validate RTSP SETUP response Step Passed Step 8 - Send RTSP PLAY RTSP Video stream playing Step Passed Step 9 - Validate RTSP PLAY response Step Passed Step 10 - Live Video, receive RTP packets Step Passed Step 11 - Send RTSP TEARDOWN RTSP Video is now toredown Step Passed Step 12 - Validate RTSP TEARDOWN response Step Passed Test complete Test PASSED

8.4.2 - NVT MEDIA STREAMING - RTP/UDP UNICAST TRANSPORT

Test Results

```
Step 1 - Setup NVT Media Stream URI - RTP/UDP Unicast transport
```

Send "Get Profiles Request"

Video Encoder Configuration found

Using profile "MediaProfile1" token = "CHANNEL1"

Send "Set Video Encoder Configuration Request"

Send "Get Stream Uri Request"

Stream URI = rtsp://10.5.151.52/channel1

Opening the video window

Step Passed

Step 2 - Send RTSP DESCRIBE

```
RTSP Describe context = v=0, o=- 94112091 1 IN IP4 10.5.151.52, s=Session streamed by stream, i=1, t=0 0, a=tool:LIVE555 Streaming Media v2009.01.26, a=type:broadcast, a=control:*, a=range:npt=0-, a=x-qt-text-nam:Session streamed by stream, a=x-qt-text-inf:1, m=video 0
```

```
RTP/AVP 26, c=IN IP4 0.0.0.0, b=AS:2362, a=framerate:25.0, a=control:track1
```

```
RTSP Describe options = DATE - Wed, Sep 08 2010 11
```

RTSP Describe options = CONTENT-TYPE - application/sdp

RTSP Describe options = CONTENT-BASE - rtsp

RTSP Describe options = CONTENT-LENGTH - 323

Step Passed

Step 3 - Validate RTSP DESCRIBE response

Step Passed

Step 4 - Send RTSP SETUP

RTSP Setup Session ID = 3

RTSP Setup Timeout = 30

```
RTSP Setup Transport = DESTINATION - 10.5.151.11
```

RTSP Setup Transport = RTP/AVP

RTSP Setup Transport = CLIENT_PORT - 40000-40001

RTSP Setup Transport = UNICAST

RTSP Setup Transport = SOURCE - 10.5.151.52

RTSP Setup Transport = SERVER_PORT - 6970-6971

Step Passed

Step 5 - Validate RTSP SETUP response

Step Passed

Step 6 - Send RTSP PLAY RTSP Video stream playing Step Passed Step 7 - Validate RTSP PLAY response Step Passed Step 8 - Live Video, receive RTP packets Step Passed Step 9 - Send RTSP TEARDOWN RTSP Video is now toredown Step Passed Step 10 - Validate RTSP TEARDOWN response Step Passed Test complete Test PASSED

8.4.3 - NVT MEDIA STREAMING - RTP/RTSP/HTTP TRANSPORT

Test Results

Step 1 - Setup NVT Media Stream URI - RTP/RTSP/HTTP transport

Send "Get Profiles Request"

Send "Set Video Encoder Configuration Request"

Send "Get Stream Uri Request"

Stream URI = http://10.5.151.52:80/stream/bidirect/channel1

Opening the video window

Step Passed

Step 2 - Send HTTP Get request

HTTP Packet received - HTTP/1.0 200 OK

Server: mini_httpd

Connection: close

Cache-Control: no-store

Pragma: no-cache

Content-Type: application/x-rtsp-tunnelled

Step Passed

Step 3 - Validate HTTP Get response

Step Passed

Step 4 - Send HTTP POST request

HTTP Packet sent - POST /stream/bidirect/channel1 HTTP/1.0

User-Agent: OnvifStreamerControl x-sessioncookie: rlDp70Uuu0O2RnblbJAjwA== Content-Type: application/x-rtsp-tunnelled Pragma: no-cache Cache-Control: no-cache Content-Length: 32767 Expires: Wed, 08 Sep 2010 03:54:17 GMT Step Passed Step 5 - Send RTSP DESCRIBE RTSP Describe context = v=0, o=-42915681 1 IN IP4 10.5.151.52, s=Session streamed by stream, i=1, t=0 0, a=tool:LIVE555 Streaming Media v2009.01.26, a=type:broadcast, a=control:*, a=range:npt=0-, a=x-qt-text-nam:Session streamed by stream, a=x-qt-text-inf:1, m=video 0 RTP/AVP 26, c=IN IP4 0.0.0.0, b=AS:2362, a=framerate:25.0, a=control:track1 RTSP Describe options = DATE - Thu, Jan 01 2009 00 RTSP Describe options = CONTENT-TYPE - application/sdp RTSP Describe options = CONTENT-BASE - rtsp RTSP Describe options = CONTENT-LENGTH - 323 Step Passed Step 6 - Validate RTSP DESCRIBE response Step Passed Step 7 - Send RTSP SETUP RTSP Setup Session ID = 2RTSP Setup Timeout = 30 RTSP Setup Transport = DESTINATION - 10.5.151.11 RTSP Setup Transport = INTERLEAVED - 0-1 RTSP Setup Transport = UNICAST RTSP Setup Transport = SOURCE - 10.5.151.52 RTSP Setup Transport = RTP/AVP/TCP Step Passed Step 8 - Validate RTSP SETUP response Step Passed Step 9 - Send RTSP PLAY RTSP Video stream playing Step Passed Step 10 - Validate RTSP PLAY response Step Passed Step 11 - Live Video, receive HTTP packets Step Passed

Step 12 - Send RTSP TEARDOWN Step Passed Test complete Test PASSED

8.4.4 - NVT MEDIA STREAMING – RTSP KEEPALIVE

Test Results

Step 1 - Setup NVT Media Stream URI - RTP/UDP Unicast transport

Send "Get Profiles Request"

Video Encoder Configuration found

Using profile "MediaProfile1" token = "CHANNEL1"

Send "Set Video Encoder Configuration Request"

Send "Get Stream Uri Request"

Stream URI = rtsp://10.5.151.52/channel1

Opening the video window

Step Passed

Step 2 - Send RTSP DESCRIBE

```
RTSP Describe context = v=0, o=- 94112091 1 IN IP4 10.5.151.52, s=Session streamed by
stream, i=1, t=0 0, a=tool:LIVE555 Streaming Media v2009.01.26, a=type:broadcast, a=control:*,
a=range:npt=0-, a=x-qt-text-nam:Session streamed by stream, a=x-qt-text-inf:1, m=video 0
RTP/AVP 26, c=IN IP4 0.0.0, b=AS:2362, a=framerate:25.0, a=control:track1
RTSP Describe options = DATE - Wed, Sep 08 2010 11
RTSP Describe options = CONTENT-TYPE - application/sdp
RTSP Describe options = CONTENT-BASE - rtsp
RTSP Describe options = CONTENT-LENGTH - 323
Step Passed
Step 3 - Validate RTSP DESCRIBE response
Step Passed
```

Step 4 - Send RTSP SETUP

RTSP Setup Session ID = 4

RTSP Setup Timeout = 30

RTSP Setup Transport = DESTINATION - 10.5.151.11

RTSP Setup Transport = RTP/AVP

RTSP Setup Transport = CLIENT_PORT - 40000-40001

RTSP Setup Transport = UNICAST

RTSP Setup Transport = SOURCE - 10.5.151.52

RTSP Setup Transport = SERVER_PORT - 6970-6971 Step Passed Step 5 - Validate RTSP SETUP response Step Passed Step 6 - Send RTSP PLAY **RTSP** Video stream playing Step Passed Step 7 - Validate RTSP PLAY response Step Passed Step 8 - Send RTSP SET_PARAMETER "Timeout" RTSP Video Set Parameter responded correctly Step Passed Step 9 - Validate RTSP SET_PARAMETER response Step Passed Step 10 - Live Video, receive RTP packets Step Passed Step 11 - Send RTSP TEARDOWN **RTSP** Video is now toredown Step Passed Step 12 - Validate RTSP TEARDOWN response Step Passed Test complete **Test PASSED**