



## **ONVIF Conformance Test**

Performed by

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### **Device Under Test**

Brand - SAMSUNG TECHWIN

Model - SNP-3120

Serial Number - 0

Firmware Version - 1.00\_100709

Other - 0

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 - 2010-07-09 @ 8:06:50

## ONVIF Test Summary

Test Count: 45

Mandatory 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 - The camera is now rebooting.. Please reconnect later

Step Passed

Step 3 - Receive multicast HELLO Message

Multicast Hello Message received

Step Passed

Test complete

Test PASSED

### 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 - The camera is now rebooting.. Please reconnect later

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/type/video\_encoder

Device Scope found - onvif://www.onvif.org/type/audio\_encoder

Device Scope found - onvif://www.onvif.org/hardware/SNP-3120V

Device Scope found - onvif://www.onvif.org/location/country/korea

Device Scope found - onvif://www.onvif.org/location/city/seoul

Device Scope found - onvif://www.onvif.org/name/SNP-3120V

Step Passed

Step 3.1 - Transmit multicast PROBE message

Scope Item = onvif://www.onvif.org/type/video\_encoder

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/audio\_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/hardware/SNP-3120V

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/location/country/korea

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/city/seoul

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/name/SNP-3120V

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

Unit did not respond 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/type/video\\_encoder](http://www.onvif.org/type/video_encoder)

Device Scope found - onvif://www.onvif.org/type/audio\_encoder  
Device Scope found - onvif://www.onvif.org/hardware/SNP-3120V  
Device Scope found - onvif://www.onvif.org/location/country/korea  
Device Scope found - onvif://www.onvif.org/location/city/seoul  
Device Scope found - onvif://www.onvif.org/name/SNP-3120V

Step Passed

Step 3.1 - Transmit unicast PROBE message

Scope Item = onvif://www.onvif.org/type/video\_encoder

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/audio\_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/hardware/SNP-3120V

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/location/country/korea

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/city/seoul

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/name/SNP-3120V

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

Unit did not respond 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/type/video\_encoder

Device Scope found - onvif://www.onvif.org/type/audio\_encoder

Device Scope found - onvif://www.onvif.org/hardware/SNP-3120V

Device Scope found - onvif://www.onvif.org/location/country/korea

Device Scope found - onvif://www.onvif.org/location/city/seoul

Device Scope found - onvif://www.onvif.org/name/SNP-3120V

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 - Trying overwriting permanent device scope setting - SOAP-ENV:Senderter:OperationProhibitedter:ScopeOverwriteTrying overwriting permanent device scope settingThe scope parameter overwrites permanent device scope setting, command rejected.  
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

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 - The camera is now rebooting.. Please reconnect later

Step Passed

Step 3 - Receive multicast BYE message

Response Message validated

Step Passed

Prepare to pause for "User defined boot time" 100000 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 -

<http://schemas.xmlsoap.org/ws/2005/04/discovery/faultSOAP->

ENV:Senderd:MatchingRuleNotSupportedthe matching rule specified is not supportedList of

xs:anyURI  
as required  
Step Passed  
Test complete  
Test PASSED

## Device Management Test Cases

### 8.2.1 - NVT WSDL URL

#### Test Results

Step 1 - Transmit GetWsdUrlRequest message  
Step Passed  
Step 2 - Receive GetWsdUrlResponse message  
Message validated  
WSDL URL = <http://www.onvif.org/ver10>  
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 1.1

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

POST returned a SOAP error, The service is not supported - SOAP-  
ENV:Receiverter:ActionNotSupportedter:NoSuchServiceThe service is not supportedThe  
requested WSDL service category is not supported by the NVT.

"ANALYTICS" capabilities no supported

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

POST returned a SOAP error, The service is not supported - SOAP-  
ENV:Receiverter:ActionNotSupportedter:NoSuchServiceThe service is not supportedThe  
requested WSDL service category is not supported by the NVT.

"EVENTS" capabilities no supported

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

POST returned a SOAP error, The service is not supported - SOAP-  
ENV:Receiverter:ActionNotSupportedter:NoSuchServiceThe service is not supportedThe  
requested WSDL service category is not supported by the NVT.

"IMAGING" capabilities no supported

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 =

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 - Invalid name - SOAP-  
ENV:Senderter:InvalidArgValter:InvalidHostnameInvalid nameThe requested hostname cannot be  
accepted by the NVT  
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 - Invalid address - SOAP-

ENV:Senderter:InvalidArgValter:InvalidIPv4AddressInvalid addressThe suggested IPv4 address is invalid.

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 - Invalid address - SOAP-

ENV:Senderter:InvalidArgValter:InvalidIPv4AddressInvalid addressThe 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 - Samsung Techwin

Model - SNP-3120V  
FirmwareVersion - 1.00\_100709  
SerialNumber - 0  
HardwareId - SNP-3120V  
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 - Invalid data - SOAP-

ENV:Senderter:InvalidArgValter:InvalidTimeZoneInvalid dataAn invalid timezone was specified.  
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 - Invalid data - SOAP-

ENV:Senderter:InvalidArgValter:InvalidDateTimeInvalid dataAn invalid date or time was specified.  
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 - The camera is now rebooting.. Please reconnect later  
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 = MJPEG  
Token = 01df5919-3b02-43c1-9e33-8cb44a95f683  
Profile found = H.264  
Token = 35e03833-a173-42c8-9554-471fea3da234  
Profile found = MPEG4  
Token = 063fdc92-077d-4299-9ce0-72471e147ce6  
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 = MJPEG

Video Source Configuration Token found = 0261664c-bb0d-486a-b845-85aa735e6f08

Video Encoder Configuration Token found = 0261664c-bb0d-486a-b845-85aa735e6f08

Step Passed

Step 3 - Transmit CreateProfilesRequest message

Name = "testprofile40"

Step Passed

Step 4 - Receive CreateProfilesResponse message

Message validated

Create profile response

Profile testprofile40

Profile token testprofile40

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  
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 - Profile token does not exist - SOAP-  
ENV:Senderter:InvalidArgValter:NoProfileProfile token does not existThe requested profile token  
Profile Token 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 = encoder0

Token = cb3a894a-b21b-4fad-b3a9-d9fec4d958de

Profile found = encoder1

Token = e300ddc7-ae8f-4322-98fb-021dd55afb09

Profile found = encoder2

Token = 82c97df2-ec2b-4485-a787-a1bde29dc775

Step Passed

Step 3 - Transmit GetVideoEncoderConfigurationRequest message

Step Passed

Step 4 - Receive GetVideoEncoderConfigurationResponse message

Message validated

Video Encoder Configuration - encoder0

Configuration token - cb3a894a-b21b-4fad-b3a9-d9fec4d958de

Configuration encoding - JPEG

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 = encoder0

Token = cb3a894a-b21b-4fad-b3a9-d9fec4d958de

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://192.168.1.100:554/onvif/profile1/media.smp

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 = encoder0  
Token = cb3a894a-b21b-4fad-b3a9-d9fec4d958de  
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://192.168.1.100:80/profile1/media.smp  
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 - Profile token does not exist - SOAP-  
ENV:Senderter:InvalidArgValter:NoProfileProfile token does not existThe requested profile token  
Profile Token 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 = MJPEG

Token = 01df5919-3b02-43c1-9e33-8cb44a95f683

Profile found = H.264

Token = 35e03833-a173-42c8-9554-471fea3da234

Profile found = MPEG4

Token = 063fdc92-077d-4299-9ce0-72471e147ce6

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 "MJPEG" token = "01df5919-3b02-43c1-9e33-8cb44a95f683"

Send "Set Video Encoder Configuration Request"

Send "Get Stream Uri Request"

Stream URI = rtsp://192.168.1.100:554/onvif/profile1/media.smp

Opening the video window

Step Passed

Step 2 - Send RTSP OPTIONS

RTSP Option Methods = DATE - Sat Jan 1 00

RTSP Option Methods = PUBLIC - DESCRIBE, SETUP, TEARDOWN, PLAY, PAUSE,  
OPTIONS, GET\_PARAMETER

RTSP Option Methods = EXPIRES - Sat Jan 1 00

RTSP Option Methods = CACHE-CONTROL - must-revalidate

Step Passed

Step 3 - Validate RTSP OPTIONS response

Step Passed

Step 4 - Send RTSP DESCRIBE

RTSP Describe context = v=0, i=samsung, o=- 0 0 IN IP4 192.168.1.105, s=Media  
Presentation, c=IN IP4 0.0.0.0, b=AS:384064, t=0 0,  
a=control:rtsp://192.168.1.100:554/onvif/profile1/media.smp, a=range:npt=now-, m=video 60000  
RTP/AVP 26, b=AS:384000, a=rtpmap:26 JPEG/90000,  
a=control:rtsp://192.168.1.100:554/onvif/profile1/media.smp/trackID=v, a=cliprect:0,0,480,640,  
a=framesize:26 640-480, a=framerate:25000000.0, m=audio 60002 RTP/AVP 0, b=AS:64,  
a=rtpmap:0 PCMU/8000, a=control:rtsp://192.168.1.100:554/onvif/profile1/media.smp/trackID=a

RTSP Describe options = CONTENT-BASE - rtsp

RTSP Describe options = X-ACCEPT-DYNAMIC-RATE - 1

RTSP Describe options = CONTENT-LENGTH - 518

RTSP Describe options = CACHE-CONTROL - must-revalidate

RTSP Describe options = EXPIRES - Sat Jan 1 00

RTSP Describe options = X-ACCEPT-RETRANSMIT - our-retransmit

RTSP Describe options = CONTENT-TYPE - application/sdp

RTSP Describe options = DATE - Sat Jan 1 00

Step Passed

Step 5 - Validate RTSP DESCRIBE response

Step Passed

Step 6 - Send RTSP SETUP

RTSP Setup Session ID = 0

RTSP Setup Timeout = 60

RTSP Setup Transport = RTP/AVP/UDP

RTSP Setup Transport = SERVER\_PORT - 60000-60001

RTSP Setup Transport = CLIENT\_PORT - 40000-40001

RTSP Setup Transport = UNICAST

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 "MJPEG" token = "01df5919-3b02-43c1-9e33-8cb44a95f683"  
Send "Set Video Encoder Configuration Request"  
Send "Get Stream Uri Request"  
Stream URI = rtsp://192.168.1.100:554/onvif/profile1/media.smp  
Opening the video window  
Step Passed  
Step 2 - Send RTSP DESCRIBE  
RTSP Describe context = v=0, i=samsung, o=- 0 0 IN IP4 192.168.1.105, s=Media  
Presentation, c=IN IP4 0.0.0.0, b=AS:384064, t=0 0,  
a=control:rtsp://192.168.1.100:554/onvif/profile1/media.smp, a=range:npt=now-, m=video 40000  
RTP/AVP 26, b=AS:384000, a=rtpmap:26 JPEG/90000,  
a=control:rtsp://192.168.1.100:554/onvif/profile1/media.smp/trackID=v, a=cliprect:0,0,480,640,  
a=framesize:26 640-480, a=framerate:25000000.0, m=audio 40002 RTP/AVP 0, b=AS:64,  
a=rtpmap:0 PCMU/8000, a=control:rtsp://192.168.1.100:554/onvif/profile1/media.smp/trackID=a  
RTSP Describe options = CONTENT-BASE - rtsp

RTSP Describe options = X-ACCEPT-DYNAMIC-RATE - 1

RTSP Describe options = CONTENT-LENGTH - 518

RTSP Describe options = CACHE-CONTROL - must-revalidate

RTSP Describe options = EXPIRES - Sat Jan 1 00

RTSP Describe options = X-ACCEPT-RETRANSMIT - our-retransmit

RTSP Describe options = CONTENT-TYPE - application/sdp

RTSP Describe options = DATE - Sat Jan 1 00

Step Passed

Step 3 - Validate RTSP DESCRIBE response

Step Passed

Step 4 - Send RTSP SETUP

RTSP Setup Session ID = 0

RTSP Setup Timeout = 60

RTSP Setup Transport = RTP/AVP/UDP

RTSP Setup Transport = SERVER\_PORT - 40000-40001

RTSP Setup Transport = CLIENT\_PORT - 40000-40001

RTSP Setup Transport = UNICAST

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://192.168.1.100:80/profile1/media.smp

Opening the video window

Step Passed

Step 2 - Send HTTP Get request

HTTP Packet received - HTTP/1.0 200 OK

Server: Samsung IP Camera

Content-Type: application/x-rtsp-tunnelled

Connection: close

Date: Sat, 01 Jan 2000 00:01:31 GMT

Step Passed

Step 3 - Validate HTTP Get response

Step Passed

Step 4 - Send HTTP POST request

HTTP Packet sent - POST /profile1/media.smp HTTP/1.0

User-Agent: OnvifStreamerControl

x-sessioncookie: h1mO7Frwm0aMA+EYoLthkw==

Content-Type: application/x-rtsp-tunnelled

Pragma: no-cache

Cache-Control: no-cache

Content-Length: 32767

Expires: Fri, 09 Jul 2010 11:06:12 GMT

Step Passed

Step 5 - Send RTSP DESCRIBE

RTSP Describe context = v=0, i=samsung, o=- 0 0 IN IP4 127.0.0.1, s=Media Presentation, c=IN IP4 0.0.0.0, b=AS:384064, t=0 0, a=control:127.0.0.1:554/profile1/media.smp, a=range:npt=now-, m=video 0 RTP/AVP 26, b=AS:384000, a=rtpmap:26 JPEG/90000, a=control:127.0.0.1:554/profile1/media.smp/trackID=v, a=cliprect:0,0,480,640, a=framesize:26 640-480, a=framerate:25000000.0, m=audio 0 RTP/AVP 0, b=AS:64, a=rtpmap:0 PCMU/8000, a=control:127.0.0.1:554/profile1/media.smp/trackID=a

RTSP Describe options = CONTENT-BASE - 127.0.0.1

RTSP Describe options = X-ACCEPT-DYNAMIC-RATE - 1

RTSP Describe options = CONTENT-LENGTH - 455

RTSP Describe options = CACHE-CONTROL - must-revalidate  
RTSP Describe options = EXPIRES - Sat Jan 1 00  
RTSP Describe options = X-ACCEPT-RETRANSMIT - our-retransmit  
RTSP Describe options = CONTENT-TYPE - application/sdp  
RTSP Describe options = DATE - Sat Jan 1 00

Step Passed

Step 6 - Validate RTSP DESCRIBE response

Step Passed

Step 7 - Send RTSP SETUP

RTSP Setup Session ID = 0

RTSP Setup Timeout = 60

RTSP Setup Transport = UNICAST

RTSP Setup Transport = INTERLEAVED - 0-1

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 "MJPEG" token = "01df5919-3b02-43c1-9e33-8cb44a95f683"

Send "Set Video Encoder Configuration Request"

Send "Get Stream Uri Request"

Stream URI = rtsp://192.168.1.100:554/onvif/profile1/media.smp

Opening the video window

Step Passed

Step 2 - Send RTSP DESCRIBE

RTSP Describe context = v=0, i=samsung, o=- 0 0 IN IP4 192.168.1.105, s=Media  
Presentation, c=IN IP4 0.0.0.0, b=AS:384064, t=0 0,  
a=control:rtsp://192.168.1.100:554/onvif/profile1/media.smp, a=range:npt=now-, m=video 40018  
RTP/AVP 26, b=AS:384000, a=rtpmap:26 JPEG/90000,  
a=control:rtsp://192.168.1.100:554/onvif/profile1/media.smp/trackID=v, a=cliprect:0,0,480,640,  
a=framesize:26 640-480, a=framerate:25000000.0, m=audio 40020 RTP/AVP 0, b=AS:64,  
a=rtpmap:0 PCMU/8000, a=control:rtsp://192.168.1.100:554/onvif/profile1/media.smp/trackID=a

RTSP Describe options = CONTENT-BASE - rtsp

RTSP Describe options = X-ACCEPT-DYNAMIC-RATE - 1

RTSP Describe options = CONTENT-LENGTH - 518

RTSP Describe options = CACHE-CONTROL - must-revalidate

RTSP Describe options = EXPIRES - Sat Jan 1 00

RTSP Describe options = X-ACCEPT-RETRANSMIT - our-retransmit

RTSP Describe options = CONTENT-TYPE - application/sdp

RTSP Describe options = DATE - Sat Jan 1 00

Step Passed

Step 3 - Validate RTSP DESCRIBE response

Step Passed

Step 4 - Send RTSP SETUP

RTSP Setup Session ID = 0

RTSP Setup Timeout = 60

RTSP Setup Transport = RTP/AVP/UDP

RTSP Setup Transport = SERVER\_PORT - 40018-40019

RTSP Setup Transport = CLIENT\_PORT - 40000-40001

RTSP Setup Transport = UNICAST

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