

Request for Quotation (RfQ)
For ONVIF Technical Services Committee
Device Testing Working Group
&
Profile T Working Group
Projects “Gumballhead” & “Hobgoblin”

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Quotation Due: 2017-June-19

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1. Introduction

ONVIF™ is an open industry forum for the development of a global standard for the interface of IP-based physical security products. Information about ONVIF, its objectives and members can be found on <http://www.onvif.org/>.

The ONVIF Device Test Tool will be used by the members of ONVIF to test conformance of IP-based physical security products with the ONVIF Test Specification, which in turn is based on the ONVIF Profile Specifications and ONVIF Network Interface Specifications, and WSDL and XML schemas, as described in the ONVIF Conformance Process Specification.

2. Project Purpose

The purpose of this project is to produce two releases of the ONVIF Device Test Tool and ONVIF Test Specification for Profile S, Profile G, Profile C, Profile Q and Profile A and Profile T.

This project will deliver an incremental release of the ONVIF Device Test Tool and ONVIF Test Specification at the end of project Gumballhead ('v17.12') followed by another incremental release at the end of project Hobgoblin ('v18.06').

3. Service Requested

- Update the Test Specification and Test Tool for ONVIF Devices based on two successive Scopes-of-Work: **Project Gumballhead** for a December 2017 release and **Project Hobgoblin** for a June 2018 release. It will require development of the ONVIF Device Test Tool, writing test cases for the ONVIF Test Specification and implementation of the test cases in the ONVIF Device Test Tool.
- Additional work items and requirements might be identified during the project and will be prioritized by the workgroups before being submitted to the contractor.
- Coordinate the development effort made by the other ONVIF working groups working with the Contractor. The Device Testing WG is responsible for the integration and coordination of the different ONVIF working group development efforts on the ONVIF Device Test Tool and ONVIF Test Specification, and will be the main point of contact to the Contractor in case of conflicts between projects run in parallel.
- Prepare documents for public release.
- Run Test Tool Clinics at relevant ONVIF Developers Plugfests (ODP) for the purpose of practical field test, to collect member feedback and improvement suggestions and DTT member training. The

Device Testing WG may assign additional tasks and priorities during the preparation period for each ODP.

For a detailed description of the service requested, see Section 4, Description of Requested Service.

4. Description of Requested Service

The service being requested MUST fulfil the following requirements. Requirement levels MUST be interpreted as described in RFC 2119¹ “Key words for use in RFCs to indicate requirement levels”.

1. The projects MUST be developed in accordance with the schedule outlined in Appendix A.
2. Any deviations from the schedule outlined in Appendix A MUST be approved by ONVIF.
3. The project SHOULD use the following resources (manpower equivalent) for respective projects.
 - A) Project Gumballhead
 - i. 1000 man-hours total, including project management, design and implementation of ONVIF Device Test Tool features, new test case implementation, modification of existing test cases and bug fixing, testing, design and modification of test cases for ONVIF Test specification documents, validation of test cases, regression testing of bug fixes and modifications to existing test cases and features and technical documentation.
 - ii. 300 man-hours for service buffer. This number of man-hours should be allocated as a service buffer for Project Gumballhead. This buffer should be used in case the allocated resources above run out and additional work items need to be carried out during the project.
 - B) Project Hobgoblin
 - i. 1000 man-hours total, including project management, design and implementation of ONVIF Device Test Tool features, new test case implementation, modification of existing test cases and bug fixing, testing, design and modification of test cases for ONVIF Test specification documents, validation of test cases, regression testing of bug fixes and modifications to existing test cases and features and technical documentation.
 - ii. 400 man-hours for service buffer. This number of man-hours should be allocated as a service buffer for Project Hobgoblin. This resource should be used in case the allocated resources above run out and additional work items need to be carried out during the project.

¹ See: <http://www.ietf.org/rfc/rfc2119.txt>

4. The projects MUST include the work items outlined in Appendix D, Appendix E and Appendix F. The **Device Testing WG, Profile A WG or Profile T WG** can at any time decide to drop or postpone a work item. The scope of the project deliverables will be adjusted if necessary to keep the release date of the official release (see Appendix A) and/or to keep the project within the resource plan (as described above).
5. The projects MUST deliver an ONVIF Device Test Tool and Test Specification and DUT Simulator as outlined in Appendix B and Appendix C.
6. The projects MUST follow the technical requirements outlined in Appendix G during the ONVIF Device Test Tool and DUT Simulator development.
7. The projects MUST respect the style and structure of the ONVIF Test Specification when updating the documents.
8. The final deliverables MUST pass a review before the service is considered delivered; up to 30 days might be required to complete the review. If the workgroup exceeds the 30-day period, the service will automatically be considered delivered for all payment purposes.
9. Any further maintenance and expansion work done to the ONVIF Device Test Tool and/or ONVIF Test Specification is subject to further quotations and separate contracts. A renewed cooperation of the Contractor and ONVIF for these tasks over many development steps is possible and where possible appreciated, however not guaranteed.

5. Execution of Service

The execution of the service must fulfil the following requirements:

1. The service must be executed by capable and qualified employees or sub-contractors under the same rules.
2. The Contractor must provide a weekly progress report to the **Device Testing WG, Profile A WG** and **Profile T WG** outlining the tasks performed and the issues encountered. The report must preferably consist of a burndown chart or similar graphical representation of work left to do versus time.
3. The contractor must provide the results of the regression tests executed for every release of a prototype.
4. Interpretation issues encountered during development or test case writing MUST be forwarded to and handled by the corresponding working group based on the responsibilities listed in Appendix C.
5. Throughout the projects the **Device Testing WG, Profile A WG** or **Profile T WG** might call for telephone conferences and/or face-to-face meetings with the Contractor to address any possible open questions and to review the progress. The Contractor MUST attend those requested telephone conferences and face-to-face meetings.
 - a. The Contractor may be requested to attend ONVIF Face-to-Face Meeting.
 - b. The Contractor is requested to participate in the 2 ONVIF Developers' Plugfest (ODP) in RfQ time frame and shall run the 'Test Tool Clinic'.
 - c. The **Device Testing WG** MUST give the Contractor a notice of at least two months in advance if participation is required.
 - d. At least one technical resource and one manager assigned to the projects must be legally authorized to travel outside of their home country.

6. Protective Rights

1. ONVIF will hold all rights to the ONVIF Device Test Tool software (the development results), its source code, documentation, and related inventions, achieved by employees and sub-contractors of the Contractor.
2. ONVIF will obtain exclusive and discretionary rights of use without any territorial restrictions or time limits.
3. The Contractor notifies ONVIF if and where it intends to use material in the ONVIF Device Test Tool which is affecting rights of a third party.
4. The Contractor will ensure in an appropriate way that ONVIF can claim inventions made by employees and sub-contractors of the Contractor.

7. Confidentiality

1. The Contractor MUST sign a non-disclosure agreement (NDA) with ONVIF prior to the initiation of the project. This NDA is for ONVIF to share draft technical specifications as well as other necessary non-public information of ONVIF, needed to fulfil this requested service.
2. The Contractor MUST keep all development results and related documents strictly confidential and must release them only to the ONVIF office and the assigned technical contacts of ONVIF.

8. Quotation

The quotation MUST at least contain the following information:

1. Cost of requested service and all other related costs.
2. Estimate for travel expenses for two representatives of the Contractor.

Possible travel requests for project Gumballhead: Verona (Italy), Sep 2017 and Seoul (South Korea),
Nov 2017

Possible travel requests for project Hobgoblin: Americas, Feb 2018 and Europe, June 2018

1. References

The following ONVIF documents **MUST** be used as a reference in the project:

- Profile S Specification
- Profile C Specification
- Profile G Specification
- Profile Q Specification
- Profile A Specification RC
- Profile T Specification (Draft)
- Network Interface Specifications v16.12
- Feature Discovery Specification v17.01
- Test Case Summary for Profile Conformance v17.01
- Device Test Specification v17.01
- Client Test Specification v16.12
- Conformance Process Specification v4.0
- Application Programmers Guide

These documents are to be delivered together with this document or upon request by the Contractor.

These documents **MAY** be replaced with newer versions after the start of the project. In such a case the **Device Testing WG** will inform the Contractor and discuss appropriate actions.

2. Contacts

General contact:

ONVIF

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Technical Contacts:

Technical issues and questions concerning the ONVIF specifications, schemas, and this Request for Quotation MUST be addressed to:

ONVIF TSC Device Testing WG

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ONVIF Profile T WG

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Appendix A - Timeline for Service

Due dates correspond to end of day in UTC time. See [Appendix B](#) for definition of deliverables.

01-June-2017	Circulation of this Request for Quotation
19-Jun-2017	Quotation due to be received by the ONVIF Office and Device Testing WG by e-mail
03-Jul-2017	Contractor selected & agreement signed

Project Gumballhead

04-Aug-2017	Delivery of ONVIF Device Test Tool 1 st Prototype & Test Specification 1 st Draft
08-Sep-2017	Delivery of ONVIF Device Test Tool 2 nd Prototype & Test Specification 2 nd Draft
12-15 Sep-2017	F2F Meeting Verona
06-Oct-2017	Delivery of ONVIF Device Test Tool 3 rd Prototype & Test Specification 3 rd Draft
03-Nov-2017	Delivery of ONVIF Device Test Tool & Test Specification Release Candidate
08-10 Nov 2017	17th ONVIF Developers' Plugfest, Seoul (South Korea)
13-16 Nov 2017	F2F Asia, Seoul (South Korea)
15-Dec -2017	Delivery of ONVIF Device Test Tool & Test Specification v17.12 (version YY.MM)

Project Hobgoblin

02-Feb-2018	Delivery of ONVIF Device Test Tool 1 st Prototype & Test Specification 1 st Draft
27/28 Feb 2018	F2F Meeting Americas (location tbc)
09-Mar-2018	Delivery of ONVIF Device Test Tool 2 nd Prototype & Test Specification 2 nd Draft
13-Apr-2018	Delivery of ONVIF Device Test Tool 3 rd Prototype & Test Specification 3 rd Draft
06-08 Jun 2018	18th ONVIF Developers' Plugfest, Europe, location tbc
11/12 Jun 2018	F2F Meeting Europe (location tbc)
18-May-2018	Delivery of ONVIF Device Test Tool & Test Specification Release Candidate
22-Jun-2018	Delivery of ONVIF Device Test Tool & Test Specification v18.06 (version YY.MM)

Appendix B - Definition of Deliverables

Name	Description
ONVIF Test Specification Draft	<ul style="list-style-type: none"> • Document template updated. • “Test Cases/Use-Cases” integrated into their corresponding Test Specification document in draft form. • History document must be provided for each specification document and kept up-to-date with each subsequent delivery.
ONVIF Test Specification Release Candidate	<ul style="list-style-type: none"> • Only stable “Test Cases/Use-Cases” are included in this delivery. • Total List of “Test Cases/Use-Cases” must be provided. • From that point on, only fixes requested by WG are allowed.
ONVIF Test Specification Final Release	<ul style="list-style-type: none"> • Issues identified in Release Candidate fixed or documented in release notes. • All tickets for the corresponding Milestone have been addressed or postponed (Gumballhead for December 2017 release, Hobgoblin for June 2018 release)
ONVIF Device Test Tool Prototype	<ul style="list-style-type: none"> • Partial implementation of “Test Cases/Use-Cases” validation and Test Tool features. Only tested “Test Cases/Use-Cases” and features should be delivered. • List of “Test Cases/Use-Cases” and features implemented in the prototype must also be provided.
ONVIF Device Test Tool Release Candidate	<ul style="list-style-type: none"> • Only stable “Test Cases/Use-Cases” and Features are included in this delivery. • From that point on, only fixes requested by WG are allowed.
ONVIF Device Test Tool Final Release	<ul style="list-style-type: none"> • Issues identified in Release Candidate fixed or documented in release notes. • All tickets for the corresponding Milestone have been addressed or postponed (Gumballhead for December 2017 release, Hobgoblin for June 2018 release)

Appendix C - Delivery Packages and Responsibilities

Delivery Package	Item	Target	Editing Responsibility	Review Responsibility
Test Specification	Internal Releases Notes	Workgroup	Contractor	Device Testing WG Manager/Device Testing WG
	Official Release Notes	Public	Device Test Tool WG	All WGs
	Base Test Specification	Public	Contractor	All WGs
	Media Test Specification	Public	Contractor	Device Testing WG
	Real Time Streaming Test Specification	Public	Contractor	Device Testing WG
	Imaging Test Specification	Public	Contractor	Device Testing WG
	PTZ Test Specification	Public	Contractor	Device Testing WG
	Door Control Test Specification	Public	Contractor	Device Testing WG
	Access Control Test Specification	Public	Contractor	Device Testing WG
	Replay Test Specification	Public	Contractor	Device Testing WG
	Receiver Test Specification	Public	Contractor	Device Testing WG
	Recording Control Test Specification	Public	Contractor	Device Testing WG
	Search Test Specification	Public	Contractor	Device Testing WG
	Advanced Security Service Test Specification	Public	Contractor	Device Testing
	Profile Q Test Specification	Public	Contractor	Device Testing WG
	Profile T Test Specification	Workgroup	Contractor	Profile T WG
	Access Rules Test Specification	Public	Contractor	Device Testing WG
	Credential Test Specification	Public	Contractor	Device Testing WG
	Schedule Test Specification	Public	Contractor	Device Testing WG
	Analytics Engine Device Test Specification	Public	Contractor	Device Testing WG
Test Case Summary for Profile Conformance	Public	Contractor	All WGs	
Total List of Test Cases	WG	Contractor	All WGs	
ONVIF Device Test Tool	Binaries	ONVIF Members	Contractor	All WGs
	Source Code	Workgroup	Contractor	All WGs
	Help Files	ONVIF Members	Contractor	Device Testing WG
	Installation Guide	ONVIF Members	Contractor	Device Testing WG
	Internal Release Notes	Workgroup	Contractor	All WGs
	Official Release Notes	ONVIF Members	Device Testing WG	All WGs
	Errata Document	ONVIF Members	Device Testing WG	Device Testing WG Manager
Test Coverage Map	Workgroup	Contractor	Device Testing WG	

Delivery Package	Item	Target	Editing Responsibility	Review Responsibility
Profile	Profile S Specification	Public	Device Testing WG	Device Testing WG
	Profile C Specification	Public	Device Testing WG	Device Testing WG
	Profile G Specification	Public	Device Testing WG	Device Testing WG
	Profile Q Specification	Public	Device Testing WG	Device Testing WG
	Profile A Specification	Public	Device Testing WG	Device Testing WG
	Profile T Specification	Workgroup	Profile T WG	Profile T WG

Appendix D - Project GUMBALLHEAD– Scope-of-work (Service based)

The **Device Testing WG, Profile A WG and Profile T WG** uses a ticket system to manage all work items for the Contractor and for the working group. The tickets can be consulted at <https://wush.net/trac/onvif-ext/>
Only tickets targeted at the Milestone Gumballhead are part of this Scope-of-work. Additional tickets will be created during the project and will be prioritized by the workgroup.

The Contractor must follow the instructions detailed here https://wush.net/trac/onvif-ext/wiki/best_practices_vendor_company when working with the tickets.

Ticket	Summary	Type	Priority
#1330	GoToHomePosition doesn't work with a PTZ configuration added to a custom profile	Defect	High
For tests in section 4.5 of the "ONVIF PTZ Test Specification", when the device supports profile creation, the vendor MUST also test with a PTZ configuration in a custom profile.			

Ticket	Summary	Type	Priority
#1411	Coverage Maps updates for all profiles	Task	High
<p>The scope of the ticket is to update Coverage Maps updates for all profiles</p> <ul style="list-style-type: none"> The most important one being Profile T As 17.12 being the last project before specification release we need to identify the test holes as soon as possible so that they can be included into DTT. <p>Additional tasks</p> <ul style="list-style-type: none"> In this ticket, vendor MUST come up with a better readable/maintainable format of the document Vendor MUST also explore if the coverage maps can be autogenerated based on Inputs of Profile specification and the existing DTT tests. 			

Ticket	Summary	Type	Priority
#1140	Profile C User Interaction Removal: Option to run specific scripts when waiting for event topic	ChangeRequest	Medium
<p>To completely remove user interaction for Profile C some feature for running specific scripts (e.g. bat-scripts with specific commands to the device or other test setup), when waiting for a specific event topic in a specific test case is needed.</p> <p>The vendor MUST add an optional configuration element for the DTT, where one maps Test case, event topic and a script. If this feature is not used the test cases would run as today with operator input, otherwise it would start a specific script when reaching a user interaction waiting point. Thus, removing the need for an operator to be present.</p>			

Ticket	Summary	Type	Priority
#1400	Behavior of recording job in case media profile is removed or changed	ChangeRequest	medium
The vendor MUST provide a solution for a scenario wherein a media profile is removed or changed.			

Ticket	Summary	Type	Priority
#1251	Teardown command error	Defect	High
<p>Newer Win 7 64 bit machines always gives this error on all products.</p> <p>Tests that show this error: '1-1-44', 'SET SYNCHRONIZATION POINT - H.264' '1-1-53', 'MEDIA STREAMING JPEG (VALIDATING RTP HEADER EXTENSION)' '1-1-45', 'MEDIA STREAMING RTP-Unicast/RTSP/HTTP/TCP (LINE BREAKS IN BASE64 ENCODING)' '1-1-33', 'MEDIA STREAMING - RTSP KEEPALIVE (OPTIONS)' '1-1-32', 'MEDIA STREAMING RTSP KEEPALIVE (SET_PARAMETER)'</p> <p>Vendor MUST provide a fix to ensure that the tests mentioned above run successfully on Win 7 64 bit machines.</p>			

Ticket	Summary	Type	Priority
#1285	A device may gain Profile S compliance while authenticating RTSP methods with Basic Authentication	Defect	Medium
<p>We may have a case where a device and client can both pass Profile S certification, but video will not be streamable by the client.</p> <p>In Profile S section 7.1, HTTP Digest is mandatory for clients and they need to follow the core specification section 5.12.1 which states that "when authenticating RTSP and HTTP methods [...] digest authentication [RFC 2617] shall be used for RTSP and HTTP".</p> <p>Also, WS-Username token is mandatory for clients, but it will not be used to authenticate RSTP methods according to the core specification.</p> <p>Considering this, a conformant Profile S client expects a device to authenticate the RTSP methods with Digest or not to authenticate them at all.</p> <p>Vendor MUST change the test to take care of this issue.</p>			

Ticket	Summary	Type	Priority
#1304	PTZ using Media2 test specification - testing all PTZ nodes	Defect	Medium
In the current test specification, the tool uses the same PTZ node for all tests. This means that problems on other PTZ nodes won't be detected. Vendor MUST ensure that all PTZ nodes are tested.			

Ticket	Summary	Type	Priority
#1347	GetOSDs missing test	Defect	Medium
<p>There are no checks for the following case: If no tokens are provided the device shall respond with all available OSD configurations. Vendor MUST introduce a check for the same.</p>			

Ticket	Summary	Type	Priority
#1277	DTT Crash data collection enhancement	Enhancement	Medium
<p>Vendor MUST include the following features for DTT Crash log enhancement</p> <ul style="list-style-type: none"> • DTT should save the log in the background while executing conformance in the GUI mode. • DTT tool crash dump package shall be created for analyzing further UI issues 			

Ticket	Summary	Type	Priority
#1409	Improvement for Media2-2-1-1 GetVideoEncoderInstances	Enhancement	Medium
<p>The vendor MUST make the following improvements in the device:</p> <ul style="list-style-type: none"> • DTT must accept creating profiles. • DTT must offer the necessary VECs to achieve the limits provided in the GetVideoEncoderInstances? and the DTT must be able to add them to a compatible profile. 			

Ticket	Summary	Type	Priority
#1346	GetStreamUri missing tests	Task	Medium
<p>The vendor MUST introduce checks for the following requirements:</p> <ul style="list-style-type: none"> • For full compatibility with other ONVIF services a device shall not generate URIs longer than 128 octets. • A device that signals the RTSPStreaming capability shall support this command. On a request for transport protocol RtspOverHttp? a device shall return a URI that uses the same port as the web service. 			

Ticket	Summary	Type	Priority
#1348	Media2 video + audio streaming	Task	Medium
<p>The vendor MUST add test cases for streaming of both video and audio at the same time and streaming of audio for profiles only with audio.</p>			

Ticket	Summary	Type	Priority
#1402	New test case for constancy of source list in DeviceIO and Media1	Task	Medium

<u>Ticket</u>	<u>Summary</u>	<u>Type</u>	<u>Priority</u>
	The vendor MUST add test cases for the following: If device supports both Media1 and DeviceIO check that the list of video sources returned by DeviceIO/GetVideoSources and Media1/GetVideoSources are identical. This should cover the issues of using DeviceIO for Media1, since the Imaging test cases use GetVideoSources? only to get list of Video Sources.		

<u>Ticket</u>	<u>Summary</u>	<u>Type</u>	<u>Priority</u>
#1404	Add test case for RemoveConfiguration with type=All	Task	Medium
	The vendor MUST add test that verifies RemoveConfiguration with type=All removes all the configurations in the profile.		

<u>Ticket</u>	<u>Summary</u>	<u>Type</u>	<u>Priority</u>
#1405	Checking of response element name in device response	Task	Medium
	Current implementation of DTT does not fail device response in case it returns not expected element as response (SetVideoEncoderConfiguration command for example). The vendor MUST ensure that response element name in device response is checked.		

<u>Ticket</u>	<u>Summary</u>	<u>Type</u>	<u>Priority</u>
#1340	Profile S/G/T Coverage: No positive test cases for MessageContentFilter	Defect	Low
	Profile S/G/T Coverage: No positive testcases for MessageContentFilter? . Since this is a mandatory feature the vendor MUST add a test case for this feature		

<u>Ticket</u>	<u>Summary</u>	<u>Type</u>	<u>Priority</u>
#1178	Test spec: Serial Ports	Task	Low
	The vendor MUST add test cases for Serial Ports in "ONVIF DeviceIO Test Specification", testing the following operations: <ul style="list-style-type: none"> • GetSerialPorts • GetSerialPortConfiguration • GetSerialPortConfigurationOptions • SetSerialPortConfiguration • SendReceiveSerialCommand 		

<u>Ticket</u>	<u>Summary</u>	<u>Type</u>	<u>Priority</u>
#1179	Test cases that verified for Serial Ports operations	Task	Low

Ticket	Summary	Type	Priority
	The vendor MUST produce Device Test Tool that verifies Serial Port operations of the DeviceIO Service according to test cases written for ticket #1178 .		
New test cases shall be located under "DeviceIO" -> "Serial Ports"			

Ticket	Summary	Type	Priority
#1316	Test Spec: Provisioning Service	Task	Low
The vendor MUST create new Test Specification for Provisioning Service. Following test cases MUST be added:			
<ul style="list-style-type: none"> • Pan Move • Tilt Move • Zoom Move • Roll Move • Focus Move • Stop 			
The current specification can be found at https://www.onvif.org/profiles/specifications/			

Ticket	Summary	Type	Priority
#1317	DTT: Provisioning Service	Task	Low
The vendor MUST produce Device Test Tool that verifies Provisioning Service according to test cases written for ticket #1316 . New test cases MUST be located under "Provisioning".			

Ticket	Summary	Type	Priority
#1318	Test Spec: Thermal Service	Task	Low
The vendor MUST create new Test Specification for Thermal Service. And add test cases for:			
<ul style="list-style-type: none"> • GetServiceCapabilities • GetConfiguration • GetConfigurationOptions • SetConfiguration 			
Current Thermal Test Specification can be found at https://www.onvif.org/profiles/specifications/			

Ticket	Summary	Type	Priority
#1319	DTT: Thermal Service	Task	Low
The vendor MUST produce Device Test Tool that verifies Thermal Service according to test cases written for ticket #1318 . New test cases MUST be located under "Thermal".			

Ticket	Summary	Type	Priority
#1320	Test Spec: Geo Location Configuration	Task	Low
<p>The vendor MUST add test cases to Base Test Specification for testing Geo Location Configuration. Add test cases for:</p> <ul style="list-style-type: none"> • GetGeoLocation • SetGeoLocation • DeleteGeoLocation <p>Get Location is part of the Core Spec: https://www.onvif.org/profiles/specifications/</p>			

Ticket	Summary	Type	Priority
#1321	DTT: Geo Location Configuration	Task	Low
<p>The vendor MUST produce Device Test Tool that verifies Geo Location Configuration according to test cases written for ticket #1320. New test cases MUST be located under "Device Management" -> "Geo Location".</p>			

Ticket	Summary	Type	Priority
#1408	Test spec: Privacy Masks	Task	Low
<p>The vendor MUST Add to "Media2 Test Specification" test cases for Privacy Masks, testing the following operations:</p> <ul style="list-style-type: none"> • CreateMask • DeleteMask • SetMask • GetMasks • GetMaskOptions 			

Ticket	Summary	Type	Priority
#1410	DTT: Privacy Masks	Task	Low
<p>The vendor MUST produce Device Test Tool that verifies Privacy Mask operations of the Media2 Service according to test cases written for ticket #1408.</p> <p>New test cases shall be located under "Media2 Configuration" -> "Privacy Masks"</p>			

Ticket	Summary	Type	Priority
#1425	Integration of test specification into DTT	Enhancement	Medium
The vendor MUST integrate all the test specification documents in DocBook format into the tool.			

Appendix E - Project Hobgoblin- Initial Scope-of-work

The **Device Testing WG** uses a ticket system to manage all work items for the Contractor and for the working group. The tickets can be consulted at <https://wush.net/trac/onvif-ext>. However, any details about what kind of work items are to be carried out will be discussed and determined at a later stage.

The Contractor must follow the instructions detailed here https://wush.net/trac/onvif-ext/wiki/best_practices_vendor_company when working with the tickets.

<u>Ticket</u>	<u>Summary</u>	<u>Type</u>	<u>Priority</u>
N/A			

Project Hobgoblin will also include all items postponed from Project Gumballhead.

Appendix F - Technical Requirements for the ONVIF Device Test Tool

1. The ONVIF Device Test Tool v17.06 MUST be used as a base for this project.
2. The existing functionality of the ONVIF Device Test Tool v17.06 MUST NOT be altered other than to incorporate the functions and operations requested herein or where the workgroup explicitly approves the changes.
3. All configuration changes that are made by a test case MUST be reverted before the test case terminates.
4. Test case definitions MUST support sequential execution of test cases.
5. The structure and coding practice MUST adhere that of the MSDN: Design Guidelines for Class Library Developers, to be easily amended and maintained.
6. The software source code MUST be documented in good practice in English in the standard source code comments scheme. Documentation MUST at least cover classes, methods, parameters, return values, and exceptions. Level of details of the documentation must be such that ONVIF, or a knowledgeable third party requested by ONVIF, can further develop and/or amend the software.
7. The software source code MUST be developed using the workgroup-provided Version Control System. The workgroup is currently using Subversion for version control of the Device Test Tool and Device Test Specification files.
8. Implementation MUST be done in C# [C-Sharp] according to respective standards ECMA-334 and ISO/IEC 23270 and SHOULD use the .NET [dotnet] framework.
9. All external frameworks used MUST be approved by the workgroup, actively maintained by the community and covered by an open license.
10. The executable application, the source code and the accompanying documentation MUST be delivered in electronic form to the workgroups, using the External Wiki (<https://wush.net/trac/onvif-ext>) before the projects closure or on request by the working group.
11. The workgroups MUST report defects against the executable application, the source code and the accompanying documentation using the External Wiki (<https://wush.net/trac/onvif-ext>).
12. User interaction during execution of tests SHOULD be avoided where possible. Introduction of user interaction MUST be approved by the **Device Testing WG**.
13. Help pages MUST include images and text describing all operation modes of the ONVIF Device Test Tool.
14. Minimum hardware requirements
 - a. Ordinary Intel x86 architecture based PC
 - b. One Ethernet network interface

15. Software requirements

- a. Operating system: 32-bit and 64-bit versions of Windows 7 Professional and later versions.
- b. Graphical User interface in American English language

Appendix G - Outline of Quality Related Deliverables

1. Document and execute test cases to validate the behaviour of the ONVIF Device Test Tool, including but not restricted to:
 - a. Correctness of documents generated by the Tool.
 - b. Correctness of test procedure in Conformance Mode.
 - c. Execute Test Tool with sample inputs provided by members of ONVIF.
 - d. Generation of DoC only after a completely successful run.
2. Provide a “lessons learned” document regarding any relevant problems or issues found during development, including but not restricted to:
 - a. Correctness of WSDL files.
 - b. Correctness of technical specifications.
 - c. Ambiguity or limitations of the specifications.
 - d. Process and communication with the workgroup.