



Broadband Forum TR-069 Conformance Report

University of New Hampshire Home Networking Consortium

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June 1, 2016

John Smith
XYZ, Inc.
21 Madbury Rd Suite 100
Durham, NH 02834

Dear John Smith,

Enclosed are the results from the Broadband Forum TR-069 Conformance Certification performed on the following:

Product Name	XYZ 5500
Product Description	Home Gateway
UNH-IOL Product ID	HNC-XYZ-0000022222
Software Version	v1.0
Product Category	Device:2
WAN MAC Address	00:11:22:33:44:55
WAN IP Address	192.168.200.2
LAN MAC Address	00:11:22:33:44:56
LAN IP Address	192.168.1.1
Conditionally Mandatory Feature Support	FactoryReset, CancelTransfer, Upload, ScheduleInform, GetAllQueuedTransfers, DHCPv4 CWMP Options, SSL 3.0, TLS 1.0, TLS 1.2, EnableCWMP, Default Active Notification Throttle, 3 rd Party URL Modification

The testing was performed according to the Broadband Forum document IR-069i1, which may be downloaded [here](#). You must be a member of the Broadband Forum to access this test plan.

If you have any questions about the test procedures or results, please feel free to contact me via e-mail at jdoe@iol.unh.edu or by phone at 603-862-4569.

Please use Adobe Acrobat to validate the authenticity of this document.



Test Tool and Test Specification Information

CD Router Version	Version 9.0 build 10 (18745)
CloudShark Version	CloudShark Enterprise v2.3.2530
Test Script Version	6.1
Broadband Forum Document	IR-069
Test Specification	TR-069 Conformance Test Plan
UNH-IOL Result ID	1236
Report Issued Version	v1.0

Test Result Key

Result	Meaning	Interpretation
PASS	Pass	The Device Under Test (DUT) was observed to exhibit conformant behavior.
FAIL	Fail	The Device Under Test (DUT) was observed to exhibit non-conformant behavior.
N/A	Not Applicable	This test does not apply to the device type or is not applicable to the testing program selected.
N/S	Not Supported	The Device Under Test (DUT) was not observed to support the necessary functionality required to perform these tests or the requirement is optional and not supported by this device.
N/T	Not Tested	This test was not performed and therefore this is not a complete test report. Please see the comments for additional reasons.
UA	Unavailable	The test was not performed due to limitation of the test tool(s) or interoperable systems, or the test methodology is still under development.

Functionality Tag Key

Functionality Tag	Meaning	Interpretation
[M]	Mandatory	Mandatory tests are tests that are required to be run against all DUTs being certified.
[C]	Conditionally Mandatory	Conditionally Mandatory tests are only run against DUTs that support stated functionality of the specific test.



Technical Summary

During the testing process, no issues were uncovered.

Test Case	Result	Details
5.2 – ACS Discovery using DHCPv6	N/Sⁱ	The CPE does not support DHCPv6 ACS URL Discovery.
5.4 – ACS Rediscovery using DHCPv6		
5.6 – DHCP Retry to the DHCPv6 Server		
5.13 – Handling Null Terminated ACS URL obtained from DHCPv6 server		

Detailed Technical Summary

ⁱ 5.2, 5.4, 5.6, 5.13:

The CPE does not support DHCPv6 ACS URL Discovery; therefore these test cases were omitted.

Test Setup

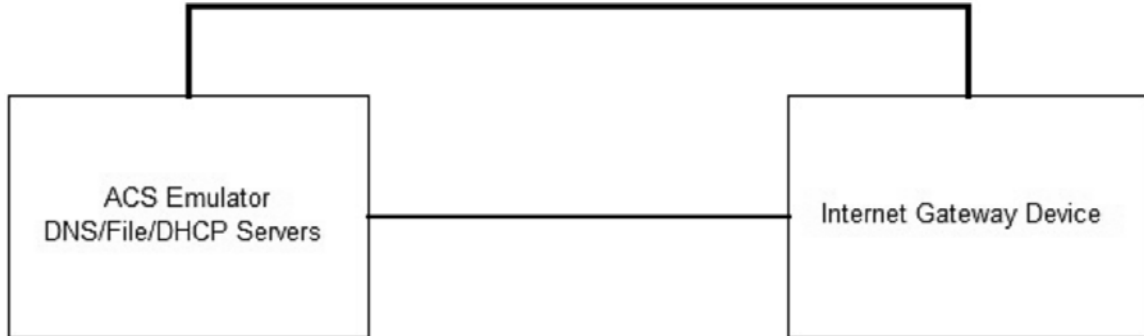


Figure 1: RG Test Setup via Ethernet

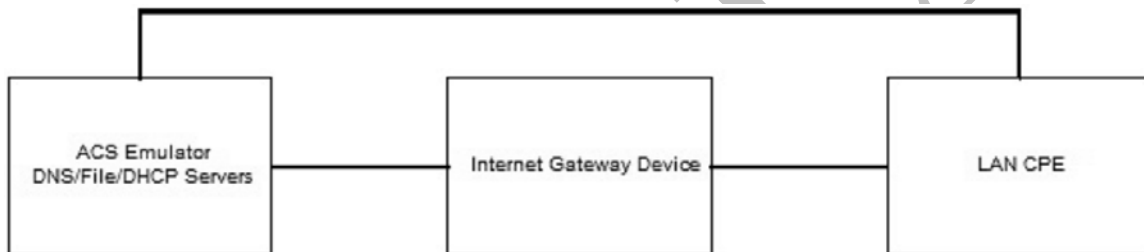


Figure 2: End Device Test Setup via Ethernet Through an RG

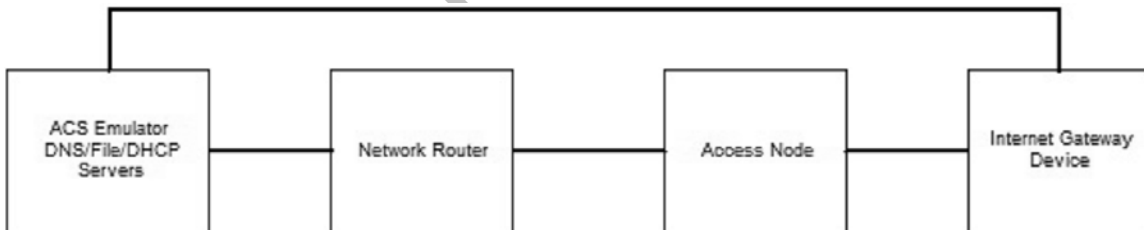


Figure 3: RG Test Setup via DSL/PON/Cable



Figure 4: End Device Test Setup via Ethernet through an RG that is connected via DSL/PON/Cable

**Technical Report**

	Test Case	BBF.069 Result
[C]	5.1 ACS Discovery using DHCPv4	PASS
[C]	5.2 ACS Discovery using DHCPv6	N/S
[C]	5.3 ACS Rediscovery using DHCPv4	PASS
[C]	5.4 ACS Rediscovery using DHCPv6	N/S
[C]	5.5 DHCP Inform Retry to the DHCPv4 server	PASS
[C]	5.6 DHCP Inform Retry to the DHCPv6 server	N/S
[M]	5.7 Session Initiation and Termination	PASS
[M]	5.8 Session Initiation and Termination With no RPC	PASS
[M]	5.9 Persistent TCP Connection Across a Single CWMP session	PASS
[M]	5.10 Multiple TCP Connections Across a Single CWMP session	PASS
[C]	5.11 Connection to ACS uses same mechanism after factory reset	PASS
[C]	5.12 Handling Null Terminated ACS URL obtained from DHCPv4 Server	PASS
[C]	5.13 Handling Null Terminated ACS URL obtained from DHCPv6 Server	N/S
[M]	5.14 Handling DNS server response	PASS
[M]	5.15 ACS Modifies URL	PASS
[C]	5.16 ACS URL change on the DUT by third party means	PASS
[M]	5.17 Parameters modified by ACS do not create a "4 VALUE CHANGE Inform event to the ACS	PASS
[M]	5.18 Event Discard after BOOTSTRAP Inform	PASS
[M]	5.19 Connection after Connection Request	PASS
[M]	5.20 Connection Request while session exists	PASS
[M]	5.21 Connection after PeriodicInformInterval	PASS
[C]	5.22 Connection Establishment using SSL 3.0	PASS
[C]	5.23 Connection Establishment using TLS 1.0	PASS
[C]	5.24 Connection Establishment using TLS 1.2	PASS
[C]	5.25 Common Name certificate validation	PASS
[C]	5.26 Rejection of Invalid Certificate	PASS
[M]	5.27 Use of Multiple Session Cookies Across Transactions in a Session	PASS
[M]	5.28 Session Retry	PASS
[M]	5.29 SOAP Response in an HTTP Request	PASS
[M]	5.30 HTTP Redirection Test – 302 Redirect	PASS
[M]	5.31 HTTP Redirection Test – 307 Redirect	PASS
[M]	5.32 HTTP Redirection – Multiple Redirections	PASS
[C]	5.33 HTTP Redirection – HTTPS with URL Matching Certificate	PASS
[C]	5.34 HTTP Redirection – HTTPS with URL/Certificate Mismatch	PASS
[M]	5.35 Redirection at any Point in a Session	PASS
[M]	5.36 HTTP Redirection – Use of session cookies	PASS
[M]	5.37 Redirect HTTP Response Contains Data	PASS
[M]	5.38 HTTP Authentication - Basic Authentication	PASS
[M]	5.39 QOP Authentication setting	PASS
[M]	5.40 HTTP Authentication - Digest Authentication	PASS
[M]	5.41 Maximum SOAP Message Size	PASS
[M]	5.42 SetParameterValues SOAP Fault Format	PASS
[M]	5.43 GetRPCMethods and Required RPCs	PASS
[M]	5.44 GetParameterNames – Complete Path	PASS
[M]	5.45 GetParameterNames – Complete Path, NextLevel True	PASS
[M]	5.46 GetParameterNames – Partial Path – Next Level True	PASS
[M]	5.47 GetParameterNames – Partial Path – Next Level False	PASS



[M]	5.48 GetParameterNames – Invalid Path	PASS
[M]	5.49 GetParameterNames – Entire Object Model	PASS
[M]	5.50 GetParameterValues – Simple Complete Path	PASS
[M]	5.51 GetParameterValues – Multiple Complete Paths	PASS
[M]	5.52 GetParameterValues – Partial Path	PASS
[M]	5.53 GetParameterValues – Complete and Partial Paths	PASS
[M]	5.54 GetParameterValues – Entire Object Model	PASS
[M]	5.55 GetParameterValues – Fault condition	PASS
[M]	5.56 SetParameterValues – Single Parameter	PASS
[M]	5.57 SetParameterValues – Multiple Parameters	PASS
[M]	5.58 SetParameterValues – Same Parameter Multiple Times	PASS
[M]	5.59 SetParameterValues – Atomic Test	PASS
[M]	5.60 GetParameterAttributes – Complete Path	PASS
[M]	5.61 GetParameterAttributes – Multiple Complete Paths	PASS
[M]	5.62 GetParameterAttributes – Partial Path	PASS
[M]	5.63 GetParameterAttributes – Complete and Partial Path	PASS
[M]	5.64 GetParameterAttributes – Invalid Parameter Name	PASS
[M]	5.65 GetParameterAttributes – Partial Path empty	PASS
[M]	5.66 SetParameterAttributes – Active Notifications	PASS
[M]	5.67 SetParameterAttributes – Active Notifications Persistence	PASS
[M]	5.68 SetParameterAttributes – Atomic	PASS
[M]	5.69 SetParameterAttributes – Passive Notification – Complete Path	PASS
[M]	5.70 SetParameterAttributes – Passive Notification – Partial Path	PASS
[M]	5.71 SetParameterAttributes – Passive Notification – Complete and Partial Path	PASS
[M]	5.72 SetParameterAttributes – Disable Notification	PASS
[M]	5.73 SetParameterAttributes – Incorrect Parameter Name	PASS
[M]	5.74 AddObject	PASS
[M]	5.75 AddObject – Error Conditions	PASS
[M]	5.76 DeleteObject	PASS
[M]	5.77 DeleteObject – Error Conditions	PASS
[M]	5.78 Reboot	PASS
[M]	5.79 Manual Reboot	PASS
[M]	5.80 Download Test – Basic Version Upgrade	PASS
[M]	5.81 Download Test – Queuing	PASS
[M]	5.82 Download Test – Delay	PASS
[M]	5.83 Download Test – Retry	PASS
[C]	5.84 CancelTransfer	PASS
[C]	5.85 Upload	PASS
[C]	5.86 Upload – Queuing	PASS
[C]	5.87 Upload – Delay	PASS
[C]	5.88 ScheduleInform Test	PASS
[C]	5.89 FactoryReset	PASS
[M]	5.90 CWMP Faults – Basic RPC Faults	PASS
[M]	5.91 CWMP Faults – Download Failure	PASS
[C]	5.92 CWMP Faults – Upload Failure	PASS
[M]	5.93 Run Diagnostics	PASS
[C]	5.94 GetAllQueuedTranfers	PASS
[M]	5.95 XML Namespace Prefix Validation	PASS
[M]	5.96 DUT receives chunked transfer encoding	PASS
[M]	5.97 DUT properly encodes and decodes XML entities	PASS
[M]	5.98 Inform on IP address change	PASS



[M]	5.99 No Inform on reconnect with no IP address change	PASS
[C]	5.100 EnableCWMP set to false	PASS
[M]	5.101 Change ACS Username and password	PASS
[M]	5.102 PeriodInformEnable enables periodic Informs	PASS
[M]	5.103 PeriodicInformTime in The Past Controls Periodic Inform	PASS
[M]	5.104 PeriodicInformTime in the future controls periodic Inform	PASS
[C]	5.105 DefaultActiveNotificationThrottle Throttles Active Notifications	PASS
[M]	5.106 Inform Parameters Should Match DeviceInfo	PASS
[M]	5.107 Device Times Out If ACS Is Slow	PASS
[C]	5.108 Use of Certificates in The Absence of NTP	PASS
[M]	5.109 DUT receives content-length encoding	PASS

SAMPLE