USGv6 Test Selection Tables*

DHCP Server

I13-Interoperability: DHCP-Server-v1.0

Applicable Profile: NIST SP 500-267 A profile for IPv6 in the U.S. Government - Version 1.0, July 2008.

Configuration Option: DHCP-Server

Test Specification Id:

- [DHCPv6-Interoperability] IPv6 READY DHCPv6 Interoperability Test Suite, Revision 1.1.0 , [editor: IPv6 Ready Logo].

Reference:

- [RFC 3315]Droms, R. J. Bound, B. Volz, T. Lemon, C. Perkins, M. Carney, Dynamic Host Configuration Protocol for IPv6 (DHCPv6), July, 2003

Device Type Definitions:

- **ROUTER:** A device capable of forwarding packets.
- **HOST:** A device which is not a ROUTER.
- **Server:** Both HOSTs and ROUTERs can be Servers.

Interoperability Partner Requirements:

- Any host or router claiming compliance with the USGv6 profile MUST demonstrate evidence of interoperability with **three** or more independent implementations of IPv6. The three implementations must include at least one Host and at least one Router.
- Can not change Target nodes once testing has begun.

DHCPv6-Interoperability
If your Device Under Test (DUT) Type is **Server**:

- DUT = TAR-Server1 for all tests.
- TAR-Client1 = Independent Implementation Device B
- TAR-Relay-Agent1 = Independent Implementation Device C
- Third Interoperability Partner is satisfied by executing the test specification again using the following:
    - TAR-Client1 = Independent Implemenation Device D

DHCP Server Test Check List				
Reference	Test Specification Id	Test Number	Device Type	Passed
RFC 3315	DHCPv6-Interoperability	DHCPInterop.1.1: DHCPv6 Initialization	Server	
RFC 3315	DHCPv6-Interoperability	DHCPInterop.1.2: Client Initiated: Transmission of Confirm messages	Server	
RFC 3315	DHCPv6-Interoperability	DHCPInterop1.3: Client Initiated: Transmission of Renew messages	Server	
RFC 3315	DHCPv6-Interoperability	DHCPInterop.1.4: Client Initiated: Transmission of Rebind messages	Server	
RFC 3315	DHCPv6-Interoperability	DHCPInterop.1.5: Client Initiated: Transmission of Release messages	Server	
RFC 3315	DHCPv6-Interoperability	DHCPInterop.1.6: Client Initiated: Transmission of Decline messages	Server	
RFC 3315	DHCPv6-Interoperability	DHCPInterop.1.7: Server Initiated: Transmission of Advertise messages with NoAddrsAvail	Server	
RFC 3315	DHCPv6-Interoperability	DHCPInterop.1.8: Server Initiated: Transmission of Reply messages with NotOnLink	Server	
RFC 3315	DHCPv6-Interoperability	DHCPInterop.1.9: Relay-Agent Basic Message Exchanges (A) (B) (C) (D) (E) (F)	Server	
RFC 3315	DHCPv6-Interoperability	DHCPInterop.1.10: Layered Relay-Agent Basic Message Exchange (A) (B)	Server	

* The objective of this test selection sheet is to provide a reference for available test specifications that identifies tests applicable to the USGv6 Profile.