

# USGv6 Test Selection Tables\*

## DHCP Server

**I13-Interoperability:** DHCP-Server-v1.1

**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 1.1.1 , [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 Implementation Device D

<b>DHCP Server Test Check List</b>			
<b>Reference</b>	<b>Test Specification Id</b>	<b>Test Number</b>	<b>Device Type</b>
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	DHCPInterop.1.3: 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.