

# USGv6 Test Selection Tables\*

## DHCP Server Functions

**F13-Conformance:** 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-Conformance](#)] IPv6 Ready Test Specification DHCPv6, Version 1.1.5, January, 2020, [editor: [IPv6 Ready Logo](#)].

**Reference:**

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

DHCP Server Test Check List			
Reference	Test Specification Id	Test Number	Device Type
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.2.1.1: Basic Message Exchanges(A)(B)(C)(D)(E)(F)	Server
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.2.1.2: Transaction ID Consistency: Basic Exchange	Server
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.2.1.3: Implementation of DHCP constants (A)(B)	Server
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.2.1.4: Server Message Format (A)(B)	Server
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.2.1.5: Server Identifier Option Format	Server
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.2.1.6: DHCP Unique Identifier (DUID) Contents (A)(B)(C)(D)(E)(F)	Server

RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.2.1.7: Client Identifier Option	Server
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.2.1.8: IA_NA Option Format	Server
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.2.1.9: IA Address Option Format	Server
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.2.1.10: Status Code Option Format	Server
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.2.1.11: Relay Message Option Format	Server
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.2.1.12: Interface ID Option Format	Server
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.2.2.1: Transmission of Advertise Messages (A)(B)(C)(D)(E)(F)	Server
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.2.2.2: Transmission of Reply Messages (A)(B)(C)	Server
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.2.2.3: Transmission of Relay-Reply Messages (A)(B)(C)	Server
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.2.3.1: Reception of Solicit Messages (A)(B)(C)(D)	Server
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.2.3.2: Reception of Request Messages (A)(B)(C)(D)	Server
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.2.3.3: Reception of Confirm Messages (A)(B)(C)(D)	Server
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.2.3.4: Reception of Renew Messages (A)(B)(C)(D)	Server
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.2.3.5: Reception of Rebind Messages (A)(B)(C)	Server
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.2.3.6: Reception of Release Messages (A)(B)(C)	Server
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.2.3.7: Reception of Decline Messages (A)(B)(C)	Server
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.2.3.8: Reception of Invalid Solicit Message (A)(B)	Server
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.2.3.9: Reception of Invalid Request Message (A)(B)(C)	Server
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.2.3.10: Reception of Invalid Confirm Message (A)(B)	Server
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.2.3.11: Reception of Invalid Renew Message (A)(B)(C)	Server

RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.2.3.12: Reception of Invalid Rebind Message (A)(B)	Server
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.2.3.13: Reception of Invalid Release Message (A)(B)(C)	Server
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.2.3.14: Reception of Invalid Decline Message (A)(B)(C)	Server
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.2.3.15: Server Message Validation (A)(B)(C)	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.