

USGv6 Test Selection Tables*

DHCP Client

F4-Conformance: DHCP Client 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-Client

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 Client Test Check List			
Reference	Test Specification Id	Test Number	Device Type
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.1.1.1: Basic Message Exchanges(A)(B)(C)(D)(E)(F)	Client
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.1.1.2: Implementation of DHCP constants (A)(B)(C)	Client
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.1.1.3: Client Message Format	Client
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.1.1.4: Client Identifier Option Format	Client
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.1.1.5: Client DHCP Unique Identifier Contents (A)(B)(C)(D)(E)(F)	Client
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.1.1.6: IA_NA Option Format	Client
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.1.1.7: Identity Association Consistency	Client

RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.1.1.8: Server Identifier Option Format	Client
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.1.1.9: IA Address Option Format	Client
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.1.1.10: Elapsed Time Option Format(A)(B)(C)(D)(E)(F)(G)(H)	Client
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.1.2.1: Transmission of Solicit Messages(A)(B)(C)(D)	Client
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.1.2.2: Message Exchange Termination for Solicit messages (A)(B)	Client
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.1.2.3: Transmission of Request Messages (A)(B)(C)(D)	Client
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.1.2.4: Transmission of Confirm Messages (A)(B)(C)(D)	Client
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.1.2.5: Transmission of Renew Messages (A)(B)(C)(D)	Client
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.1.2.6: Transmission of Rebind Messages (A)(B)(C)(D)	Client
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.1.2.7: Transmission of Release Messages (A)(B)(C)(D)(E)(F)	Client
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.1.2.8: Transmission of Decline Messages (A)(B)(C)(D)(E)	Client
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.1.3.1: Reception of Advertise Messages	Client
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.1.3.2: Client Initiated Exchange - Reception of Reply messages (A)(B)(C)(D)(E)	Client
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.1.3.3: Client Initiated Exchange - Reception of Reply messages cont(A)(B)(C)(D)(E)(F)(G)(H)(I)(J)(K)	Client
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.1.3.4: Reception of Invalid Advertise Message (A)(B)(C)(D)	Client
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.1.3.5: Reception of Invalid Reply Message (A)(B)(C)(D)	Client
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.1.3.6: Client Message Validation (A)(B)(C)(D)(E)(F)(G)(H)(I)(J)	Client

NOTE: The following tests have been omitted from the USGv6 Test Program for the DHCPv6 Requirements. These tests are considered SHOULDs as defined by the IETF.

Not Required

Reference	Test Specification Id	Test Number	Device Type
RFC 3315	DHCPv6-Conformance	Test DHCP_Conf.1.2.4: Transmission of Confirm Messages (E)	Client

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