

USGv6 Test Selection Tables

DHCPv6 Client Requirements

I4-Interoperability: DHCPv6 Client Requirements R1v1.0

Applicable Profile: NIST SP 500-267B Revision 1 USGv6 Profile – November 2020.

Test Specification Id:

- [[DHCPv6-IOP](#)] IPv6 Ready DHCPv6 Interoperability Test Specification, [editor: [IPv6 Ready Logo](#)].

Interoperability Partner Requirements:

- Any client claiming compliance with the USGv6 profile **MUST** demonstrate evidence of interoperability with two **or more** independent server implementations of DHCPv6 and one **or more** independent relay-agent implementations of DHCPv6.

DHCPv6 Client Test Check List			
Reference	Test Specification Id	Test Number	Device Type
RFC 8415	DHCPv6-IOP	DHCPInterop.1.1: DHCPv6 Standard Exchange (A)	Client
RFC 8415	DHCPv6-IOP	DHCPInterop.1.2: Transmission of Renew Messages (A)	Client
RFC 8415	DHCPv6-IOP	DHCPInterop.1.3: Transmission of Rebind Messages (A)	Client
RFC 8415	DHCPv6-IOP	DHCPInterop.1.4: Transmission of Decline Messages	Client
RFC 8415	DHCPv6-IOP	DHCPInterop.1.5: Advertise Message Status (A)	Client
RFC 8415	DHCPv6-IOP	DHCPInterop.1.7: Single Relay-Agent Exchange (A) (C) (D) (F)	Client
RFC 8415	DHCPv6-IOP	DHCPInterop.1.12: Rebind Reply From Another Server (A)	Client
RFC 8415	DHCPv6-IOP	DHCPInterop.1.13: Address Lifetime (A)	Client
RFC 8415	DHCPv6-IOP	DHCPInterop.2.1: T1/T2 Time of Zero (A) (B)	Client
RFC 8415	DHCPv6-IOP	DHCPInterop.2.2: Change Address and Prefixes (A)	Client
RFC 3646	DHCPv6-IOP	DHCPInterop.2.6: DNS Options (A) (B)	Client

References:

- [RFC 8415] Mrugalski, T., M. Siodelski, B. Volz, A. Yourtchenko, M. Richardson, S. Jiang, T. Lemon, and T. Winters, Dynamic Host Configuration Protocol for IPv6 (DHCPv6), RFC 8415, November 2018.
- [RFC 3646] Droms, R., Editor, DNS Configuration options for Dynamic Host Configuration Protocol for IPv6 (DHCPv6), RFC 3646, December 2003.

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