USGv6 Test Selection Tables

IPv6 IPsec SHA-512-VPN Requirements (IPsec, IKEv2)

I11-Interoperability: IPv6 IPsec Security Requirements R1v1.0

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

Test Specification Id:


Interoperability Partner Requirements:

- Any implementation 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 End-Node and at least one SGW.
- Target nodes must not change once testing has begun.

IPsecv3-Interoperability

If your Device Under Test (DUT) Type is End-Node:

- DUT = TAR-EN1 for all tests.
- TAR-EN2 = Independent Implementation Device B
- TAR-SGW1 = Independent Implementation Device C
- Third Interoperability Partner is satisfied by executing the test specification again using the following:
  - TAR-SGW2 = Independent Implementation Device D
  - or
  - TAR-EN3 = Independent Implementation Device D

If your Device Under Test (DUT) Type is SGW:

- DUT = TAR-SGW1 for all tests.
- TAR-EN1 = Independent Implementation Device B
- TAR-SGW2 = Independent Implementation Device C
- Third Interoperability Partner is satisfied by executing the test specification again using the following:
  - TAR-SGW3 = Independent Implementation Device D
  - or
  - TAR-EN2 = Independent Implementation Device D

NOTE: If the SGW supports Transport Mode, it may additionally be tested as an End-Node to claim those capabilities.

Test Case Names – Test IPsec.IO.3.1, IPsec.IO.3.2

Appended to the name of these test cases is the topology and configuration required for the test run.

- EN.EN.1 – Configuration End-Node vs. End-Node 1, Transport, using Topo.EN.EN.1
- EN.EN.2 – Configuration End-Node vs. End-Node 2, Tunnel, using Topo.EN.EN.1
- EN.SGW.1 – Configuration End-Node vs. SGW 1, Tunnel, using Topo.EN.SGW.1
### IPsec-SHA-512-VPN Capability

<table>
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<th>Reference</th>
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<th>Device Type</th>
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<tr>
<td>[RFC 8221]</td>
<td>IPsec-Interoperability</td>
<td>IPsec.IO.3.2.EN.SGW.1.IPSECSA.3: IKE_AUTH Algorithms</td>
<td>SGW</td>
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**References:**


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