

**1 The Document Requiring Conformity:** USGv6 Profile Version 1.0, July 2008. (NIST SP506-267)

**2 Product Identifier:** VMware vSphere for Enterprise

**3 Supplier's Name, Address and SDOC Contact Details**  
 VMware, Inc 3401 Hillview Ave Palo Alto, CA, 94304

**4 Product as Tested/Declared:** *Product Identifier, version/revision information, details of configuration tested.*  
 5.5

**5 Product Family** (other products using same IPv6 stack(s) to which these results are declared to apply). *Check Product Family attestation below.*

**6 USGv6 Capability summary.** (For each distinct IPv6 stack in the product provide a summary of its USGv6 capabilities below and include a detailed test result summary). *e.g. example-prod-id/stack-1: USGv6-v1-Host: IPv6-Base+Addr-Arch+IPsec-v3+IKEv2+SLAC+Link-Ethernet.*  
 USGv6-v1-Host: IPv6-Base+Addr-Arch+SLAAC+IPsec-v3+ESP+Link = Ethernet

**7 Self Contained or Composite SDOC? (Must indicate one).**

|            |  |            |   |
|------------|--|------------|---|
| <b>YES</b> | All of the declared USGv6 capabilities of this product are addressed by original test results reported in this SDOC. | <b>N/A</b> | Some or all of the USGv6 capabilities of this product are provided by the use and/or integration of unmodified components that have their own unique USGv6 SDOCs. All of the relevant referenced SDOCs are identified in section 8 and attached. This product's page 2 will indicate which capabilities are provided by specific referenced components (product-id/stack-id). |
|------------|--|------------|---|

**8 Additional Declarations / Attachments:** (List supplier & product-id/stack-id for referenced and attached test results in the case of composite products).

|     | Component Supplier | Product ID: | Stack ID: | Notes: |
|-----|--------------------|-------------|-----------|--------|
| [1] |                    |             |           |        |
| [2] |                    |             |           |        |
| [3] |                    |             |           |        |
| [4] |                    |             |           |        |

**9 Supplementary Attestations (Answer all).**

|            |   |            |  |
|------------|---|------------|--|
| <b>YES</b> | This product is fully functional in dual stack environments. That is, no claimed capabilities are invalidated if this product is operated in a dual stack (6 and 4) network environment.                                | <b>YES</b> | This product is fully functional in IPv6 only environments. That is, no claimed capabilities are invalidated if this product is deployed in a network environment that does not support ipv4.  |
| <b>N/A</b> | This SDOC contains a capabilities test report for each unique IPv6 stack in the product. If not, the stacks/ports not covered are documented, and how their ipv6 capabilities differ from those reported are explained. | <b>N/A</b> | All of the products listed in the product family in section 5 are implemented such that their USGv6 capabilities are identical in form and function across the entire product family. The specific conformance and interoperability test results for the USGv6 capabilities of an identified member of this product family are provided in this SDOC. The SDOC attests that these tested USGv6 capabilities are identical and unmodified for all the products cited above. |

**10 Signature** Stanley Ho **Date** 14-Jun-17

**Print Name / Title** Stanley Ho / Staff Engineer

See instructions for fields 1-12 on Page 4.

| Product ID:      |         | VMware vSphere for Enterprise                         |                                |                        |        | Stack ID: |                               | 5.5  |                             |  |  |
|------------------|---------|---|--------------------------------|------------------------|--------|-----------|-------------------------------|--|-----------------------------|--|--|
| Spec / Reference | Section | USGv6-v1 Profile Requirements                         | Context / Configuration Option | Supported Capabilities |        |           | USGv6 Testing Program Results |  |                             |  |  |
|                  |         |   |                                | Host                   | Router | NPD       | Test Suite Conformance/NPD    | Test Lab / Result ID, Note #, or Component Ref | Test Suite Interoperability | Test Lab / Result ID, Note #, or Component Ref |  |
| SP500-267        | 6.1     | <b>IPv6 Basic Requirements</b>                        |                                |                        |        |           |                               |  |                             |  |  |
|                  |         | support of IPv6 base (IPv6;ICMPv6;PMTU;ND)            | IPv6-Base                      | P                      |        |           | Basic_v1.*_C                  | UNH-IOL/15156                                  | Basic_V1.*_I                | UNH-IOL/15157                                  |  |
|                  |         | support of PMTU Discovery Protocol requirements       | PMTU                           | P                      |        |           | Basic_v1.*_C                  | UNH-IOL/15156                                  | Basic_V1.*_I                | UNH-IOL/15157                                  |  |
|                  |         | support of stateless address auto-configuration       | SLAAC                          | P                      |        |           | SLAAC-V1.*_C                  | UNH-IOL/15160                                  | SLAAC-V1.*_I                | UNH-IOL/15161                                  |  |
|                  |         | support of Creation of Global Addresses               | SLAAC - c(M)                   | P                      |        |           | SLAAC-V1.*_C                  | UNH-IOL/15160                                  | SLAAC-V1.*_I                | UNH-IOL/15161                                  |  |
|                  |         | support of SLAAC privacy extensions                   | PrivAddr                       |                        |        |           | Self Test                     |  | Self Test                   |  |  |
|                  |         | support of stateful (DHCP) address auto-configuration | DHCP-Client                    |                        |        |           | DHCP_Client_v1.*_C            |  | DHCP_Client_v1.*_I          |  |  |
|                  |         | support of automated router prefix delegation         | DHCP-Prefix                    |                        |        |           | Self Test                     |  | Self Test                   |  |  |
|                  |         | support of neighbor discovery security extensions     | SEND                           |                        |        |           | Self Test                     |  | Self Test                   |  |  |
| SP500-267        | 6.6     | <b>Addressing Requirements</b>                        |                                |                        |        |           |                               |  |                             |  |  |
|                  |         | support of addressing architecture reqts              | Addr-Arch                      | P                      |        |           | Addr_Arch_v1.*_C              | UNH-IOL/15158                                  | Addr_Arch_v1.*_I            | UNH-IOL/15159                                  |  |
|                  |         | support of cryptographically generated addresses      | CGA                            |                        |        |           | Self Test                     |  | Self Test                   |  |  |
| SP500-267        | 6.7     | <b>IP Security Requirements</b>                       |                                |                        |        |           |                               |  |                             |  |  |
|                  |         | support of the IP security architecture               | IPsecv3                        |                        |        |           | IPsecv3_v1.*_C                | UNH-IOL/15162                                  | IPsecv3_v1.*_I              | UNH-IOL/15163                                  |  |
|                  |         | support for automated key management                  | IKEv2                          |                        |        |           | IKEv2_v1.*_C                  |  | IKEv2_v2.*_I                |  |  |
|                  |         | support for encapsulating security payloads in IP     | ESP                            | P                      |        |           | ESPv3_v1.*_C                  | UNH-IOL/15318                                  | ESP_v1.*_I                  | UNH-IOL/15319                                  |  |
| SP500-267        | 6.11    | <b>Application Requirements</b>                       |                                |                        |        |           |                               |  |                             |  |  |
|                  |         | support of DNS client/resolver functions              | DNS-Client                     |                        |        |           | Self Test                     |  | Self Test                   |  |  |
|                  |         | support of Socket application program interfaces      | SOCK                           |                        |        |           | Self Test                     |  | Self Test                   |  |  |
|                  |         | support of IPv6 uniform resource identifiers          | URI                            |                        |        |           | Self Test                     |  | Self Test                   |  |  |
|                  |         | support of a DNS server application                   | DNS-Server                     |                        |        |           | Self Test                     |  | Self Test                   |  |  |
|                  |         | support of a DHCP server application                  | DHCP-Server                    |                        |        |           | Self Test                     |  | DHCP_Serv_v1.*_I            |  |  |
| SP500-267        | 6.2     | <b>Routing Protocol Requirements</b>                  |                                |                        |        |           |                               |  |                             |  |  |
|                  |         | support of the intra-domain (interior) routing        | IGW                            |                        |        |           | Self Test                     |  | OSPFv3_v1.*_I               |  |  |
|                  |         | support for inter-domain (exterior) routing protocols | EGW                            |                        |        |           | Self Test                     |  | BGP_v1.*_I                  |  |  |
| SP500-267        | 6.4     | <b>Transition Mechanism Requirements</b>              |                                |                        |        |           |                               |  |                             |  |  |
|                  |         | support of interoperation with IPv4-only systems      | IPv4                           |                        |        |           | Self Test                     |  | Self Test                   |  |  |
|                  |         | support of tunneling IPv6 over IPv4 MPLS services     | 6PE                            |                        |        |           | Self Test                     |  | Self Test                   |  |  |
| SP500-267        | 6.8     | <b>Network Management Requirements</b>                |                                |                        |        |           |                               |  |                             |  |  |
|                  |         | support of network management services                | SNMP                           |                        |        |           | Self Test                     |  | Self Test                   |  |  |
| SP500-267        | 6.9     | <b>Multicast Requirements</b>                         |                                |                        |        |           |                               |  |                             |  |  |
|                  |         | support of basic multicast                            | Mcast                          |                        |        |           | Self Test                     |  |                             |  |  |
|                  |         | full support of multicast communications              | SSM                            |                        |        |           | Self Test                     |  | Self Test                   |  |  |
| SP500-267        | 6.10    | <b>Mobility Requirements</b>                          |                                |                        |        |           |                               |  |                             |  |  |
|                  |         | support of mobile IP capability                       | MIP                            |                        |        |           | Self Test                     |  | Self Test                   |  |  |
|                  |         | support of mobile network capabilities                | NEMO                           |                        |        |           | Self Test                     |  | Self Test                   |  |  |
| SP500-267        | 6.3     | <b>Quality of Service Requirements</b>                |                                |                        |        |           |                               |  |                             |  |  |
|                  |         | support of Differentiated Services capabilities       | DS                             |                        |        |           | Self Test                     |  | Self Test                   |  |  |
| SP500-267        | 6.12    | <b>Network Protection Device Requirements</b>         |                                |                        |        |           |                               |  |                             |  |  |
|                  |         | support of common NPD reqts                           | NPD                            |                        |        |           | N1 N2 N3 N4_v1.3              |  |                             |  |  |
|                  |         | support of basic firewall capabilities                | FW                             |                        |        |           | N1_FW_v1.3                    |  |                             |  |  |
|                  |         | support of application firewall capabilities          | APFW                           |                        |        |           | Self Test                     |  |                             |  |  |
|                  |         | support of intrusion detection capabilities           | IDS                            |                        |        |           | N3_IDS_v1.3                   |  |                             |  |  |
|                  |         | support of intrusion protection capabilities          | IPS                            |                        |        |           | N4_IPS_v1.3                   |  |                             |  |  |
| SP500-267        | 6.5     | <b>Link Specific Technologies</b>                     |                                |                        |        |           |                               |  |                             |  |  |
|                  |         | support of robust packet compression services         | ROHC                           |                        |        |           | Self Test                     |  | Self Test                   |  |  |
|                  |         | support of link technology (O:1)                      | Link= Ethernet                 | P                      |        |           | Self Test                     | Self Declaration                               | Self Test                   | Self Declaration                               |  |
|                  |         | (repeat as needed) support of link technology         | Link=                          |                        |        |           |                               |  |                             |  |  |

12 < Check HERE if this stack's DOC includes additional information about tested capabilities and options on an attached page 3 of notes.

| Level | Level of support for USGv6-v1 Requirements for capability.                                       | Color | Indication of USGv6-v1 Recommended Level of Support for device type / stack role.                                  |
|-------|--|-------|--|
|       | Blank - SDOC makes no declaration for this capability.   |       | Indicates capability that is recommended as mandatory (unconditional MUST) in the USGv6-v1 Profile.                |
| P     | Passed required tests of USGv6-V1 requirements for these capabilities.                           |       | Indicates capability that is unusual for a given device type / stack role. Do not select without careful analysis. |
| N     | See notes page for details on the level of support of USGv6-v1 requirements for this capability. |       | Indicates capability that is left optional / conditional by the recommendations of the USGv6-v1 Profile.           |
| X     | USGv6 capability not supported in product.   |       |  |

Test Suite - Specific USGv6 Test suite used for test. See: <http://www.nist.gov/usgv6/test-specifications.html>  
 Test Lab / Result ID - Abbreviation of accredited laboratory and its local identifier for this test result.  
 Note # - reference to a detailed note about this capability or result on attached page.  
 Component Ref - Supplier / Product / Stack ID of distinctly tested component that provides this capability.

| Field<br>13<br>Note # | Product Id:         |         |                               | Stack Id:                            |                        |        | Notes about USGv6-v1 Capabilities. |                               |                            |                                |                            |
|-----------------------|---------------------|---------|-------------------------------|--------------------------------------|------------------------|--------|------------------------------------|-------------------------------|----------------------------|--------------------------------|----------------------------|
|                       | Spec /<br>Reference | Section | USGv6-v1 Profile Requirements | Context /<br>Configuration<br>Option | Supported Capabilities |        |                                    | Test Suite<br>Conformance/NPD | Test Lab / Result ID, Note | Test Suite<br>Interoperability | Test Lab / Result ID, Note |
|                       |                     |         |                               |                                      | Host                   | Router | NPD                                |                               |                            |                                |                            |
| 1                     |                     |         |                               |                                      |                        |        |                                    |                               |                            |                                |                            |
| <b>Discussion:</b>    |                     |         |                               |                                      |                        |        |                                    |                               |                            |                                |                            |
| 2                     |                     |         |                               |                                      |                        |        |                                    |                               |                            |                                |                            |
| <b>Discussion:</b>    |                     |         |                               |                                      |                        |        |                                    |                               |                            |                                |                            |
| 3                     |                     |         |                               |                                      |                        |        |                                    |                               |                            |                                |                            |
| <b>Discussion:</b>    |                     |         |                               |                                      |                        |        |                                    |                               |                            |                                |                            |
| 4                     |                     |         |                               |                                      |                        |        |                                    |                               |                            |                                |                            |
| <b>Discussion:</b>    |                     |         |                               |                                      |                        |        |                                    |                               |                            |                                |                            |
| 5                     |                     |         |                               |                                      |                        |        |                                    |                               |                            |                                |                            |
| <b>Discussion:</b>    |                     |         |                               |                                      |                        |        |                                    |                               |                            |                                |                            |
| 6                     |                     |         |                               |                                      |                        |        |                                    |                               |                            |                                |                            |
| <b>Discussion:</b>    |                     |         |                               |                                      |                        |        |                                    |                               |                            |                                |                            |
| 7                     |                     |         |                               |                                      |                        |        |                                    |                               |                            |                                |                            |
| <b>Discussion:</b>    |                     |         |                               |                                      |                        |        |                                    |                               |                            |                                |                            |
| 8                     |                     |         |                               |                                      |                        |        |                                    |                               |                            |                                |                            |
| <b>Discussion:</b>    |                     |         |                               |                                      |                        |        |                                    |                               |                            |                                |                            |
| 9                     |                     |         |                               |                                      |                        |        |                                    |                               |                            |                                |                            |
| <b>Discussion:</b>    |                     |         |                               |                                      |                        |        |                                    |                               |                            |                                |                            |
| 10                    |                     |         |                               |                                      |                        |        |                                    |                               |                            |                                |                            |
| <b>Discussion:</b>    |                     |         |                               |                                      |                        |        |                                    |                               |                            |                                |                            |

**Vendor's General Notes / Discussion about this Product / Stack's capabilities:**