| [1] CONTACT INFORMATION | |
| --- | --- |
| **SUPPLIER** | **SUPPLIER SIGNATURE** |

| SUPPLIER | | SUPPLIER SIGNATURE |
| --- | --- | --- |
| **SUPPLIER NAME** | Brocade Communications Systems LLC | *DocuSigned by:* Hamid Sobouti 4/29/2023 |
| **SUPPLIER CONTACT EMAIL** | hamid.sobouti@broadcom.com | 0002787BEFEE476... |

| ACCREDITED LABORATORY | | ACCREDITED LABORATORY SIGNATURE |
| --- | --- | --- |
| **LABORATORY NAME** | UNH InterOperability Laboratory | *DocuSigned by:* Michayla Newcombe 4/28/2023 |
| **LABORATORY CONTACT EMAIL** | usgv6-sdoc@iol.unh.edu | 8C92CF35911F4C8... |

| [2] PRODUCT VERSION TESTED | [3] PRODUCT ID |
| --- | --- |
| # V9.1 | # Fabric OS |

| [4] PRODUCT FAMILY | |
| --- | --- |
| **APPLICABLE SERIES HARDWARE** | **APPLICABLE SERIES SOFTWARE** |
| X7-8, X7-4, G720, G730, 7810, G610, G620, G630, G648, MXG610, X6-4, X6-8 | Fabric OS V9.1, Fabric OS V9.2 |

| [5] UNITARY OR COMPOSITE SDOC | |
| --- | --- |
| ✔ **Unitary**: All of the declared capabilities of this product are addressed by original test results reported in this SDoC. | ☐ **Composite:** Some or all of the capabilities of this product are provided by the use and/or integration of unmodified components that have their own unique SDoCs. All of the relevant referenced SDoCs are identified in section 6 and linked. |

| [6] REF | SUPPLIER | PRODUCT ID/STACK ID | CAPABILITY SUMMARY | COMPOSITE SDOC LINK |
| --- | --- | --- | --- | --- |
| i. | Brocade Communications Systems LLC | Fabric OS/V9.1 | USGv6-r1:Host+Addr-Arch+Link=Ethernet | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| [7] USGV6-CAPABLE REQUIREMENTS | | | |
| --- | --- | --- | --- |
| ☐ USGv6-r1-Capable-Host | ☐ USGv6-r1-Capable-Router | ☐ USGv6-r1-Capable-Switch | ☐ USGv6-r1-Capable-NPP |

| [8] PROFILE(S) REFERENCED | |
| --- | --- |
| i. | NIST SP 500-267Br1, USGv6 Profile |
| ii. | |

| [9] SUPPLEMENTARY ATTESTATIONS | |
| --- | --- |
| [X] 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 (IPv6 and IPv4) network environment. | [X] 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. |
| [X] 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. | [X] All of the products listed in the product family in section 4 are implemented such that their capabilities are identical in form and function across the entire product family. The specific conformance and interoperability test results for the capabilities of an identified member of this product family are provided in this SDoC. The SDoC attests that these tested capabilities are identical and unmodified for all the products cited above. |

## Host Capabilities

| [10] PRODUCT ID/ STACK ID | | | | | CAPABILITY SUMMARY |
|---|---|---|---|---|---|
| Fabric OS/V9.1 | | | | | USGv6-r1:Host+Addr-Arch+Link=Ethernet |
| [11] SUPPORTED CAPABILITY | CAPABILITY | CONFORMANCE | | INTEROPERABILITY/FUNCTIONAL | | NOTES |
| | | TEST SELECTION | RESULT ID | TEST SELECTION | RESULT ID | |
| - | IPv6-ONLY | | | IPv6-ONLY_R1v1.*_F | | |
| NOTES | Core | Core_R1v1.*_C | UNH-IOL/34370 | Core_R1v1.*_I | UNH-IOL/34371 | - The DUT did not discard IPv6 packets that did not include all headers through an Upper-Layer header. |
| - | Extended-ICMP | Self-Test | | Self-Test | | |
| - | PLPMTUD | Self-Test | | Self-Test | | |
| - | ND-Ext | Self-Test | | Self-Test | | |
| - | ND-WL | Self-Test | | Self-Test | | |
| - | SEND | Self-Test | | Self-Test | | |
| NOTES | SLAAC | SLAAC_R1v1.*_C | UNH-IOL/34370 | SLAAC_R1v1.*_I | UNH-IOL/34371 | - The DUT did not process the Recursive DNS Server option or the DNS Search List option in the Router Advertisement. |
| - | PriAddr | Self-Test | | Self-Test | | |
| - | DHCP-Stateless | DHCP-Stateless_R1v1.*_C | | DHCP-Stateless_R1v1.*_I | | |
| - | DHCP-Client | DHCP-Client_R1v1.*_C | | DHCP-Client_R1v1.*_I | | |
| - | DHCP-Client-Ext | Self-Test | | Self-Test | | |
| - | DHCP-Prefix | DHCP-Prefix_R1v1.*_C | | DHCP-Prefix_R1v1.*_I | | |
| - | DHCP-Prefix-Ext | Self-Test | | Self-Test | | |
| - | 6Lo | Self-Test | | Self-Test | | |

# Host Capabilities

| | | | | | | |
|---|---|---|---|---|---|---|
| - | Happy-Eyeballs | Self-Test | | Self-Test | | |
| PASS | Addr-Arch | Addr-Arch_R1v1.*_C | UNH-IOL/34372 | Addr-Arch_R1v1.*_I | UNH-IOL/34373 | |
| - | CGA | Self-Test | | Self-Test | | |
| - | DNS-Client | Self-Test | | Self-Test | | |
| - | URI | Self-Test | | Self-Test | | |
| - | NTP-Client | Self-Test | | Self-Test | | |
| - | NTP-Server | Self-Test | | Self-Test | | |
| - | DNS-Server | Self-Test | | Self-Test | | |
| - | DHCP-Server | DHCP-Server_R1v1.*_C | | DHCP-Server_R1v1.*_I | | |
| - | DHCP-Server-Ext | Self-Test | | Self-Test | | |
| - | DHCP-Relay | DHCP-Relay_R1v1.*_C | | DHCP-Relay_R1v1.*_I | | |
| - | IPsec | IPsec_R1v1.*_C | | IPsec_R1v1.*_I | | |
| - | IPsec-SHA-512 | IPsec-SHA-512_R1v1.*_C | | IPsec-SHA-512_R1v1.*_I | | |
| - | SSHV2 | Self-Test | | Self-Test | | |
| - | TLS | Self-Test | | Self-Test | | |
| - | TLS-1.3 | Self-Test | | Self-Test | | |
| - | Tunneling-IP | Self-Test | | Self-Test | | |

## Host Capabilities

| | | | | | | |
|---|---|---|---|---|---|---|
| - | **Tunneling-UDP** | **Self-Test** | | **Self-Test** | | |
| - | **XLAT** | **Self-Test** | | **Self-Test** | | |
| - | **NAT64** | **Self-Test** | | **Self-Test** | | |
| - | **DNS64** | **Self-Test** | | **Self-Test** | | |
| - | **SNMP** | **Self-Test** | | **Self-Test** | | |
| - | **Tunneling** | **Self-Test** | | **Self-Test** | | |
| - | **DiffServ** | **Self-Test** | | **Self-Test** | | |
| - | **NETCONF** | **Self-Test** | | **Self-Test** | | |
| - | **SSM** | **Self-Test** | | **Self-Test** | | |
| - | **Multicast** | **Multicast_R1v1.*_C** | | **Multicast_R1v1.*_I** | | |
| - | **ECN** | **Self-Test** | | **Self-Test** | | |
| PASS | **Link =** Ethernet | **Self-Test** | Self Declaration | **Self-Test** | Self Declaration | |

# Router Capabilities

| [10] PRODUCT ID/ STACK ID | | | | | CAPABILITY SUMMARY | |
|---|---|---|---|---|---|---|
| [11] SUPPORTED CAPABILITY | CAPABILITY | CONFORMANCE | | INTEROPERABILITY/FUNCTIONAL | | NOTES |
| | | TEST SELECTION | RESULT ID | TEST SELECTION | RESULT ID | |
| - | IPv6-ONLY | | | IPv6-ONLY_R1v1.*_F | | |
| - | Core | Core_R1v1.*_C | | Core_R1v1.*_I | | |
| - | Extended-ICMP | Self-Test | | Self-Test | | |
| - | PLPMTUD | Self-Test | | Self-Test | | |
| - | ND-Ext | Self-Test | | Self-Test | | |
| - | ND-WL | Self-Test | | Self-Test | | |
| - | SEND | Self-Test | | Self-Test | | |
| - | SLAAC | SLAAC_R1v1.*_C | | SLAAC_R1v1.*_I | | |
| - | PrivAddr | Self-Test | | Self-Test | | |
| - | DHCP-Prefix | DHCP-Prefix_R1v1.*_C | | DHCP-Prefix_R1v1.*_I | | |
| - | DHCP-Prefix-Ext | Self-Test | | Self-Test | | |
| - | 6Lo | Self-Test | | Self-Test | | |
| - | Addr-Arch | Addr-Arch_R1v1.*_C | | Addr-Arch_R1v1.*_I | | |
| - | CGA | Self-Test | | Self-Test | | |

| | | | | | |
|---|---|---|---|---|---|
| - | DNS-Client | Self-Test | | Self-Test | |
| - | URI | Self-Test | | Self-Test | |
| - | NTP-Client | Self-Test | | Self-Test | |
| - | NTP-Server | Self-Test | | Self-Test | |
| - | DNS-Server | Self-Test | | Self-Test | |
| - | DHCP-Server | DHCP-Server_R1v1.*_C | | DHCP-Server_R1v1.*_I | |
| - | DHCP-Server-Ext | Self-Test | | Self-Test | |
| - | DHCP-Relay | DHCP-Relay_R1v1.*_C | | DHCP-Relay_R1v1.*_I | |
| - | OSPF | Self-Test | | OSPF_R1v1.*_I | |
| - | OSPF-IPsec | Self-Test | | Self-Test | |
| - | OSPF-Auth | Self-Test | | OSPF-Auth_R1v1.*_I | |
| - | OSPF-Ext | Self-Test | | Self-Test | |
| - | OSPF-Trans | Self-Test | | Self-Test | |
| - | OSPF-Graceful | Self-Test | | Self-Test | |
| - | ISIS | Self-Test | | Self-Test | |
| - | IS-IS-Auth | Self-Test | | Self-Test | |
| - | IS-IS-Ext | Self-Test | | Self-Test | |
| - | IS-IS-MT | Self-Test | | Self-Test | |

| | | | | | | |
|---|---|---|---|---|---|---|
| - | BGP | Self-Test | | BGP_R1v1.*_I | | |
| - | BGP-Reflect | Self-Test | | Self-Test | | |
| - | BGP-Graceful | Self-Test | | Self-Test | | |
| - | BGP-FlowSpec | Self-Test | | Self-Test | | |
| - | BGP-OV | Self-Test | | Self-Test | | |
| - | BGP-VPLS | Self-Test | | Self-Test | | |
| - | BGP-EVPN | Self-Test | | Self-Test | | |
| - | BGP-6VPE | Self-Test | | Self-Test | | |
| - | BGP-MVPN | Self-Test | | Self-Test | | |
| - | MPLS | Self-Test | | Self-Test | | |
| - | CE-Router | CE_Router_R1v1.*_C | | CE_Router_R1v1.*_I | | |
| - | VRRP | Self-Test | | Self-Test | | |
| - | IPsec | IPsec_R1v1.*_C | | IPsec_R1v1.*_I | | |
| - | IPsec-VPN | IPsec-VPN_R1v1.*_C | | IPsec-VPN_R1v1.*_I | | |
| - | IPsec-SHA-512 | IPsec-SHA-512_R1v1.*_C | | IPsec-SHA-512_R1v1.*_I | | |
| - | IPsec-SHA-512-VPN | IPsec-SHA-512-VPN_R1v1.*_C | | IPsec-SHA-512-VPN_R1v1.*_I | | |
| - | SSHV2 | Self-Test | | Self-Test | | |
| - | TLS | Self-Test | | Self-Test | | |

| | | | | | |
|---|---|---|---|---|---|
| - | TLS-1.3 | Self-Test | | Self-Test | |
| - | Tunneling-IP | Self-Test | | Self-Test | |
| - | Tunneling-UDP | Self-Test | | Self-Test | |
| - | GRE | Self-Test | | Self-Test | |
| - | DS-Lite | Self-Test | | Self-Test | |
| - | LW4over6 | Self-Test | | Self-Test | |
| - | MAP-E | Self-Test | | Self-Test | |
| - | MAP-T | Self-Test | | Self-Test | |
| - | XLAT | Self-Test | | Self-Test | |
| - | NAT64 | Self-Test | | Self-Test | |
| - | DNS64 | Self-Test | | Self-Test | |
| - | 6PE | Self-Test | | Self-Test | |
| - | LISP | Self-Test | | Self-Test | |
| - | SNMP | Self-Test | | Self-Test | |
| - | Tunneling | Self-Test | | Self-Test | |
| - | DiffServ | Self-Test | | Self-Test | |
| - | NETCONF | Self-Test | | Self-Test | |
| - | SSM | Self-Test | | Self-Test | |

| | | | | | |
|---|---|---|---|---|---|
| - | **PIM-SM** | Self-Test | | Self-Test | |
| - | **PIM-SM-IPsec** | Self-Test | | Self-Test | |
| - | **PIM-SM-BiDir** | Self-Test | | Self-Test | |
| - | **Multicast** | Multicast_R1v1.*_C | | Multicast_R1v1.*_I | |
| - | **ECN** | Self-Test | | Self-Test | |
| - | **Link =** | Self-Test | | Self-Test | |

# Application Capabilities

| [10] PRODUCT ID/ STACK ID | | | | | CAPABILITY SUMMARY | |
|---|---|---|---|---|---|---|
| | | | | | | |
| [11] SUPPORTED CAPABILITY | CAPABILITY | CONFORMANCE | | INTEROPERABILITY/FUNCTIONAL | | NOTES |
| | | TEST SELECTION | RESULT ID | TEST SELECTION | RESULT ID | |
| - | IPv6-ONLY | | | IPv6-ONLY_R1v1.*_F | | |
| - | App-Serv= | | | APP-ONLY_R1v1.*_F | | |
| - | Link = | | | Self-Test | | |

# NPP Capabilities

| [10] PRODUCT ID/ STACK ID | | | | | CAPABILITY SUMMARY |
|---|---|---|---|---|---|
| | | | | | |
| [11] SUPPORTED CAPABILITY | CAPABILITY | CONFORMANCE | | INTEROPERABILITY/FUNCTIONAL | | NOTES |
| | | TEST SELECTION | RESULT ID | TEST SELECTION | RESULT ID | |
| - | IPv6-ONLY | | | IPv6-ONLY_R1v1.*_F | | |
| - | FW | FW_R1v1.*_C | | | | |
| - | APFW | Self-Test | | | | |
| - | IDS | FW_R1v1.*_C | | | | |
| - | IPS | FW_R1v1.*_C | | | | |
| - | Link = | Self-Test | | | | |

## Switch Capabilities

| [10] PRODUCT ID/ STACK ID | | | | | CAPABILITY SUMMARY | |
|---|---|---|---|---|---|---|
| | | | | | | |
| [11] SUPPORTED CAPABILITY | CAPABILITY | CONFORMANCE | | INTEROPERABILITY/FUNCTIONAL | | |
| | | TEST SELECTION | RESULT ID | TEST SELECTION | RESULT ID | NOTES |
| - | IPv6-ONLY | | | IPv6-ONLY_R1v1.*_F | | |
| - | DHCPv6-Guard | Self-Test | | Self-Test | | |
| - | RA-Guard | Self-Test | | Self-Test | | |
| - | MLD-Snooping | Self-Test | | Self-Test | | |
| - | Link = | Self-Test | | Self-Test | | |

| | DIRECTIONS: Please use Adobe Acrobat to complete. Detailed instructions for completing and interpreting each numbered field are given below. Contact usgv6-program@nist.gov with questions. | |
|---|---|---|
| 1 | CONTACT INFORMATION | Supplier name, email and signature (digital recommended). Include printed name and date if wet ink signed. Accredited laboratory name, email and signature (digital recommended). Include printed name and date if wet ink signed. |
| 2 | PRODUCT VERSION TESTED | Firmware/ software version of product declared |
| 3 | PRODUCT ID | Suppliers concise name for product declared |
| 4 | PRODUCT FAMILY | Applicable hardware or software with an unmodified IPv6 stack from "PRODUCT VERSION TESTED" |
| 5 | UNITARY OR COMPOSITE | Indicate if this is a unitary or composite SDoC. If composite is checked, composite SDoC must be linked in section 6. |
| 6 | REF | Reference number to profile(s) reference in this SDoC |
| | SUPPLIER | Supplier name |
| | PRODUCT ID/STACK ID | Product ID must match field 3. As there may be more than one unique IPv6 stack, stack ID identifies particular stack described in CAPABILITY SUMMARY. Each unique stack requires a CAPABILTY SUMMARY. |
| | CAPABILITY SUMMARY | The strong notation as described in NIST-SP-500-267Ar1 that describes the product capabilities of the given stack. |
| | COMPOSITE SDOC LINK | URL link to composite SDoC referenced. |
| 7 | USGV6-CAPABLE REQUIREMENTS | Refer to section 5 in NIST-SP-500-267Br1 for CSS strings referenced in this section. Check the appropriate box if the product meets the requirements. |
| 8 | PROFILE(S) REFERENCED | Profile(s) referenced in the SDoC. |
| 9 | SUPPLEMENTARY ATTESTATIONS | Attestations made by the supplier. Check all that apply. |
| 10 | PRODUCT ID/STACK ID | PRODUCT ID/STACK ID for stack documented on given page. |
| | CAPABILITY SUMMARY | CAPABILITY SUMMARY for stack documented on given page. |
| 11 | SUPPORTED CAPABILITY | "PASS" – All requirements of the capability have been met "NOTES" – See notes for details regarding the level of support for this capability "X" – Capability not supported BLANK – No declaration for this capability |
| | CAPABILITY | IPv6 Capability as described in NIST-SP-500-267Ar1. |
| | TEST SELECTION | Test Selection Tables version of capabilities with existing test programs. Capabilities without an existing test program are indicated with "Self-Test" |
| | RESULT ID | Abbreviation of accredited laboratory and unique identifier of test result. Capabilities with "Self-Test" can be self-declared by writing "*Self Declaration*" in the cell. |
| | NOTES | The cell must be filled out if "NOTE" is indicated for SUPPORTED CAPABILITY. Suppliers may use notes to clarify unsupported features or non-passing results. |

| SUPPLIER GENERAL NOTES |
|---|
| |