



DEFENSE INFORMATION SYSTEMS AGENCY

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IN REPLY
REFER TO: Joint Interoperability Test Command (JTE)

20 Aug 13

MEMORANDUM FOR DISTRIBUTION

SUBJECT: Extension of the Special Interoperability Test Certification of the Hewlett Packard (HP) A5800 Series with Release 5.20.F1803L03

References: (a) DoD Directive 4630.05, "Interoperability and Supportability of Information Technology (IT) and National Security Systems (NSS)," 5 May 2004
(b) CJCSI 6212.01E, "Interoperability and Supportability of Information Technology and National Security Systems," 15 December 2008
(c) through (f), see Enclosure

1. References (a) and (b) establish the Defense Information Systems Agency (DISA), Joint Interoperability Test Command (JITC), as the responsible organization for interoperability test certification.

2. The HP A5820X-28C, A5800-60C-PWR, and A5820X-28S with Release 5.20.F1803L03 are hereinafter referred to as the system under test (SUT). The vendor submitted a Desktop Review (DTR) request to include 5800AF-48G (HP model number JG225A). The SUT meets all of its critical interoperability requirements and is certified for joint use within the Defense Information System Network (DISN) as an Assured Services Local Area Network (ASLAN) core, distribution, and access switch. The SUT is certified as interoperable for joint use within the DISN with other ASLAN components listed on the Unified Capabilities (UC) Approved Products List (APL) with the following interfaces: 10000/1000Base SX/LX, 100BaseFX, and 10/100/1000BaseT. The SUT met the critical interoperability requirements set forth in Reference (c) using test procedures derived from Reference (d). The HP A5800-56C-PWR, A5800-56C, A5800-32C-PWR, A5800-32C, and A5800-32F employ the same software and similar hardware as the SUT. The JITC analysis determined these systems to be functionally identical to the SUT for interoperability certification purposes and they are also certified for joint use.

The SUT is certified to support Defense Switched Network (DSN) Assured Services over Internet Protocol. If a component meets the minimum requirements for deployment in an ASLAN, it also meets the lesser requirements for deployment in a non-ASLAN. Non-ASLANs are "commercial grade" and provide support to Command and Control (C2) (ROUTINE only calls) (C2(R)) or non-C2 voice subscribers. The SUT is certified for joint use deployment in a non-ASLAN for C2R and non-C2 traffic. When deployed in a non-ASLAN, the SUT may also be used to receive all levels of precedence, but is limited to supporting calls that are originated at ROUTINE precedence only. Non-ASLANs do not meet the availability or redundancy requirements for C2 or Special C2 users and therefore are not authorized to support precedence calls originated above ROUTINE.

Testing of the SUT did not include video services or data applications; however, simulated preferred data, best effort data, and video traffic was generated during testing to determine the SUT's ability to prioritize and properly queue voice media and signaling traffic. No other configurations, features, or functions, except those cited within this document, are certified by the JITC. This certification expires upon changes that affect interoperability, but no later than three years from the date of the original Defense Information Assurance (IA)/Security Accreditation Working Group (DSAWG) accreditation (23 November 2010).

3. The extension of this certification is based upon Desktop Review (DTR) 5. The original certification is based on interoperability testing conducted by JITC, DISA adjudication of open test discrepancy reports (TDRs), review of the vendor's Letters of Compliance (LoC), and DSAWG accreditation. Interoperability testing was conducted by JITC at the Global Information Grid Network Test Facility, Fort Huachuca, Arizona, from 11 January through 19 March 2010 and documented in Reference (e). Review of the vendor's LoC was completed on 3 May 2010. DISA adjudication of outstanding TDRs was completed on 3 May 2010. DSAWG granted accreditation on 23 November 2010 based on the security testing completed by DISA-led IA test teams and published in a separate report, Reference (f). All testing was conducted on 3Com switches, which have all been renamed to HP switch products after HP purchased 3Com in 2010. Table 1 provides a cross-reference between the 3Com switch products certified initially and renamed as HP switch products. This DTR was requested to include new marketing names for the certified switches. These products, which are denoted by parenthesis in Table 1, are identical to the ones tested; however, the names were updated for marketing purposes. Therefore, JITC approves this DTR. Additionally, the DISA CA has approved this DTR to include the new marketing names listed in Table 1 without further testing. Therefore, the original IA approval applies to this DTR.

Table 1. HP to 3Com Switch Product Cross-Reference

3Com Switch (See note 1.)	HP Switch (See notes 1 and 2.)	Release	Function
<u>S5820X-28C</u>	<u>A5820X-28C</u> (HP 5820-14XG-SFP+ Switch with 2 Slots)	5.20.F1803L03	Core, Distribution, Access Switch
<u>S5800-60C-PWR</u>	<u>A5800-60C-PWR</u> (HP 5800-48G Switch with 2 Slots)	5.20.F1803L03	Core, Distribution, Access Switch
<u>S5820X-28S</u>	<u>A5820X-28S</u> (HP 5820-24XG-SFP+ Switch)	5.20.F1803L03	Core, Distribution, Access Switch
Not Applicable	5800AF-48G	5.20.F1803L03	Core, Distribution, Access Switch (See note 3.)
S5800-56C-PWR	A5800-56C-PWR (HP 5800-48G-PoE Switch)	5.20.F1803L03	Core, Distribution, Access Switch
S5800-56C	A5800-56C (HP 5800-48G Switch)	5.20.F1803L03	Core, Distribution, Access Switch
S5800-32C-PWR	A5800-32C-PWR (HP 5800-24G-PoE Switch)	5.20.F1803L03	Core, Distribution, Access Switch
S5800-32C	A5800-32C (HP 5800-24G Switch)	5.20.F1803L03	Core, Distribution, Access Switch
S5800-32F	A5800-32F (HP 5800-24G-SFP Switch)	5.20.F1803L03	Core, Distribution, Access Switch
Not Applicable	A5830AF-48G	5.20.R1115P01	Core, Distribution, Access Switch (See note 4.)
Not Applicable	A5830AF-96G	5.20.R1115P01	Core, Distribution, Access Switch (See note 4.)
3Com Switch Subcomponent (See note 1.)	HP Switch Subcomponent (See note 1.)	Function	
<u>0231A93G</u>	<u>JC091A</u>	4-Port 10G Ethernet SFP PLUS Optical Interface Module	
0231A93H	JC092A, JC092B	2-Port 10G Ethernet SFP PLUS Optical Interface Module (See note 5.)	

Table 1. HP to 3Com Switch Product Cross-Reference (continued)

NOTES:			
1. Components bolded and underlined were tested by JITC. The other components in the family series were not tested; however, they utilize the same software and hardware and JITC analysis determined them to be functionally identical for interoperability certification purposes and they are also certified for joint use.			
2. The switch names in parentheses were included with DTR 5 and denote new marketing names for the previously certified models.			
3. DTR 4 includes chassis model 5800AF-48G (HP model number JG225A). The 5800AF-48G is similar to the tested A5800 model, with the difference being how the air flows through the chassis.			
4. DTR 2 includes the A5830AF-48G and A5830AF-96G. JITC analysis determined they use the same software and similar hardware as the SUT and they are functionally identical to the SUT for interoperability certification purposes.			
5. DTR 1 includes subcomponent JC092B in addition to JC092A, which was included in the original certification. There are no physical differences between the two cards, JC092A is no longer available for purchase from the vendor. JC092A may continue to be used or JC092B may be employed as a replacement.			
LEGEND:			
DTR	Desktop Review	PWR	Power over Ethernet
HP	Hewlett Packard	SFP	Small Form Factor Pluggable
JITC	Joint Interoperability Test Command	XFP	10 Gigabit Small Form Factor Pluggable

4. Table 2 provides the SUT’s interface status. The SUT capability and functional requirements are listed in Table 3.

Table 2. SUT Interface Status

Interface	Applicability			CRs/FRs (See note 1.)	Status		
	Co	D	A		Co	D	A
Network Management Interfaces for Core Layer Switches							
EIA/TIA-232 (Serial)	R	R	R	EIA/TIA-232	Met	Met	Met
IEEE 802.3i (10BaseT UTP)	C	C	C	1, 6-15, 18-28, 31, 32-36, 48-53, 58-60, 65, 67-71	Not Tested (See note 2.)		
IEEE 802.3u (100BaseT UTP)	C	C	C	1, 6-15, 18-28, 31, 32-36, 48-53, 58-60, 65, 67-71	Met (See note 3.)	Met (See note 3.)	Met (See note 3.)
IEEE 802.3ab (1000BaseT UTP)	C	C	C	1, 6-15, 18-28, 31, 32-36, 48-53, 58-60, 65, 67-71	Met (See note 3.)	Met (See note 3.)	Met (See note 3.)
Uplink Interfaces for Core Layer Switches							
IEEE 802.3u (100BaseT UTP)	R	R	R	1-15, 16, 18-24, 28-31, 40, 44-53, 55-60, 65-75	Met (See notes 3, 4.)	Met (See notes 3, 4.)	Met (See notes 3, 4.)
IEEE 802.3u (100BaseFX)	C	C	C	1-6, 11, 16, 18-24, 28-31, 40-41, 44-53, 55-60, 65-75	Met (See notes 3, 4.)	Met (See notes 3, 4.)	Met (See notes 3, 4.)
IEEE 802.3ab (1000BaseT UTP)	C	C	C	1-16, 18-24, 28-31, 40, 44-53, 55-60, 65-75	Met (See notes 3, 4.)	Met (See notes 3, 4.)	Met (See notes 3, 4.)
IEEE 802.3z (1000BaseX Fiber)	R	R	C	1-5, 8-16, 18-24, 28-31, 40, 44-53, 55-60, 65-75	Met (See notes 3, 4.)	Met (See notes 3, 4.)	Met (See notes 3, 4.)
IEEE 802.3ae (10GBaseX)	C	C	C	1-5, 8-16, 18, 19, 40-41, 44-53, 55-60, 65-75	Met (See notes 3, 4.)	Met (See notes 3, 4.)	Met (See notes 3, 4.)
Access Interfaces for Core Layer Switches							
IEEE 802.3i (10BaseT UTP)	C	C	R	1-15, 18-24, 28-41, 44-54, 58-71	Met (See notes 3, 5.)	Met (See notes 3, 5.)	Met (See notes 3, 5.)
IEEE 802.3u (100BaseT UTP)	R	R	R	1-15, 18-24, 28-41, 44-54, 58-71	Met (See notes 3, 5.)	Met (See notes 3, 5.)	Met (See notes 3, 5.)
IEEE 802.3u (100BaseFX)	C	C	C	1-6, 11, 18-24, 28-31, 44-54, 58-71	Met (See notes 3, 5.)	Met (See notes 3, 5.)	Met (See notes 3, 5.)
IEEE 802.3ab (1000BaseT UTP)	C	C	C	1-15, 18-24, 28-41, 44-54, 58-71	Met (See notes 3, 5.)	Met (See notes 3, 5.)	Met (See notes 3, 5.)
IEEE 802.3z (1000BaseX Fiber)	R	R	C	1-6, 11, 18-24, 28-31, 44-54, 58-71	Met (See notes 3, 5.)	Met (See notes 3, 5.)	Met (See notes 3, 5.)

Table 2. SUT Interface Status

Interface	Applicability			CRs/FRs (See note 1.)	Status		
	Co	D	A		Co	D	A
Generic Requirements for all Interfaces							
Generic Requirements not associated with specific interfaces	R	R	R	30-32, 35, 36, 40, 69-71	Met	Met	Met
DoD IPv6 Profile Requirements	R	R	R	UCR Section 5.3.5.5	Met (See notes 3, 4, 5.)	Met (See notes 3, 4, 5.)	Met (See notes 3, 4, 5.)
Security	R	R	R	UCR Sections 5.3.1.3.8, 5.3.1.5, 5.3.1.6, and 5.4	Met (See note 6.)	Met (See note 6.)	Met (See note 6.)
NOTES:							
<p>1. The SUT's specific capability and functional requirement ID numbers depicted in the CRs/FRs column can be cross-referenced in Table 2. These requirements are for the following HP switches, which are certified in the ASLAN Core, Distribution, and Access layers: <u>A5820X-28C, A5800-60C-PWR, S5820X-28S</u>, A5800-56C-PWR, A5800-56C, A5800-32C-PWR, A5800-32C, A5800-32F, A5830AF-48G, A5830AF-96G, and 5800AF-48G. The JITC tested the devices that are bolded and underlined. The other devices listed that are not bolded or underlined are in the same family series as the SUT were not tested; however, they utilize the same OS software and hardware and JITC analysis determined them to be functionally identical for interoperability certification purposes.</p> <p>2. This interface is not offered by the SUT. This is not a required interface for a core, distribution, or access switch.</p> <p>3. During the original interoperability test, the SUT did not support the following IPv6 RFC: 4007 for ID number 53 depicted in Table 3. DISA adjudicated this as minor on 3 May 2010 with the stipulation that the vendor provide a POAM. The vendors original POAM stated they would comply by 1 October 2011 with a software update. DTR 3 includes Release 5.20.F1803L03, which is compliant to this RFC based on the vendor's LOC.</p> <p>4. During the original interoperability test, the SUT did not support the following authentication RFC: 2404 for ID number 74 depicted in Table 3. DISA adjudicated this as minor on 3 May 2010 with the stipulation that the vendor provide a POAM. The vendors original POAM stated they would comply by 1 January 2011 with a software update. DTR 3 includes Release 5.20.F1803L03, which is compliant to this RFC based on the vendor's LOC.</p> <p>5. During the original interoperability test, the SUT did not support the following IPv6 RFC: 3315 for ID number 54 depicted in Table 3. This requirement is conditional with support of DHCP and does not apply to the SUT.</p> <p>6. Security testing is accomplished via DISA-led Information Assurance test teams and published in a separate report, Reference (e).</p>							
LEGEND:							
802.3ab	1000BaseT Gbps Ethernet over twisted pair at 1 Gbps (125 Mbps)	DISA	Defense Information Systems Agency	DTR	Desktop Review		
802.3ae	10 Gbps Ethernet	EIA	Electronic Industries Alliance				
802.3i	10BaseT Mbps over twisted pair	EIA-232	Standard for defining the mechanical and electrical characteristics for connecting Data Terminal Equipment (DTE) and Data Circuit-terminating Equipment (DCE) data communications devices				
802.3u	Standard for carrier sense multiple access with collision detection at 100 Mbps						
802.3z	Gigabit Ethernet Standard						
10BaseT	10 Mbps (Baseband Operation, Twisted Pair) Ethernet	FRs	Functional Requirements				
100BaseT	100 Mbps (Baseband Operation, Twisted Pair) Ethernet	Gbps	Gigabits per second	ID	Identification		
100BaseFX	100 Mbps Ethernet over fiber	ICMP	Internet Control Message Protocol				
1000BaseFX	1000 Mbps Ethernet over fiber	IEEE	Institute of Electrical and Electronics Engineers				
1000BaseT	1000 Mbps (Baseband Operation, Twisted Pair) Ethernet	IPv6	Internet Protocol version 6	JITC	Joint Interoperability Test Command		
10GBaseX	10000 Mbps Ethernet over Category 5 Twisted Pair Copper	Mbps	Megabits per second	OS	Operating System		
A	Access	POAM	Plan of Action and Milestones				
ASLAN	Assured Services Local Area Network	R	Required				
C	Conditional	RFCs	Request for Comments				
Co	Core	SUT	System Under Test				
CRs	Capability Requirements	TIA	Telecommunications Industry Association				
D	Distribution	UCR	Unified Capabilities Requirements				
DHCP	Dynamic Host Configuration Protocol	UTP	Unshielded Twisted Pair				

Table 3. SUT Capability and Functional Requirements

ID	Requirement (See note.)	UCR Reference
1	ASLAN components can have no single point of failure for >96 users for C2 and Special C2 users. Non-ASLAN components can have a single point of failure for C2(R) and non-C2 users. (R)	5.3.1.2.1, 5.3.1.7.7
2	Non-blocking of any voice or video traffic at 50%. (R)	5.3.1.3
3	Maximum of 1 ms of jitter for all ASLAN components. (R)	5.3.1.3

Table 3. SUT Capability and Functional Requirements (continued)

ID	Requirement (See note.)		UCR Reference
4	Maximum of 0.02% packet loss for core and distribution layer components and 0.01% for access layer components. (R)		5.3.1.3
5	Maximum of 2 ms latency for core and distribution layer components and 2 ms for access layer components. (R)		5.3.1.3
6	100 Mbps IAW IEEE 802.3u and 1 Gbps IAW IEEE 802.3z for core and distribution layer components and 10 Mbps IAW IEEE 802.3i and 100 Mbps IAW IEEE 802.3u for access layer components. (R)		5.3.1.3.1
7	Force mode and auto-negotiation IAW IEEE 802.3, filtering IAW RFC 1812, and flow control IAW IEEE 802.3x. (R)		5.3.1.3.2
8	Port Parameter Requirements	Auto-negotiation IAW IEEE 802.3. (R)	5.3.1.3.2
9		Force mode IAW IEEE 802.3. (R)	
10		Flow control IAW IEEE 802.3x. (R)	
11		Filtering IAW RFC 1812. (R)	
12		Link Aggregation IAW IEEE 802.3ad (output/egress ports only). (R)	
13		Spanning Tree Protocol IAW IEEE 802.1D. (R)	
14		Multiple Spanning Tree IAW IEEE 802.1s. (R)	
15		Rapid Reconfiguration of Spanning Tree IAW IEEE 802.1w. (R)	
16	LACP link Failover and Link Aggregation IAW IEEE 802.3ad (uplink ports only). (R)		5.3.1.3.2, 5.3.1.7.7.1
17	Class of Service Marking: Layer 3 DSCPs IAW RFC 2474. (R) Layer 2 3-bit user priority field of the IEEE 802.1Q 2-byte TCI field. (C)		5.3.1.3.3
18	VLAN Capabilities IAW IEEE 802.1Q. (R)		5.3.1.3.4
19	Protocols IAW DISR profile (IPv4 and IPv6). IPv4 (R: LAN Switch, Layer 2 Switch); IPv6 (R: LAN Switch, C: Layer 2 Switch). Note: Layer 2 switch is required to support only RFC 2460, 5095, 2464, and be able to queue packets based on DSCPs in accordance with RFC 2474.		5.3.1.3.5
20	QoS Features	Shall support minimum of 4 queues. (R)	5.3.1.3.6
21		Must be able to assign VLAN tagged packets to a queue. (R)	
22		Support DSCP PHBs per RFCs 2474, 2494, 2597, 2598, and 3246. (R: LAN Switch). Note: Layer 2 switch is required to support RFC 2474 only.	
23		Support a minimum of one of the following: Weighted Fair Queuing (WFQ) IAW RFC 3662, Priority Queuing (PQ) IAW RFC 1046, or Class-Based WFQ IAW RFC 3366. (R)	
24		Must be able to assign a bandwidth or percent of traffic to any queue. (R)	
25	Network Monitoring	SNMP IAW RFC's 1157, 2206, 3410, 3411, 3412, 3413, and 3414. (R)	5.3.1.3.7
26		SNMP traps IAW RFC1215. (R)	
27		Remote monitoring IAW RFC1281 and Advanced Encryption Standard (AES) Cipher Algorithm in the SNMP User-based Security Model IAW RFC 3826. (R)	
28	Product Requirements Summary IAW UCR2008 Table 5.3.1-5. (R)		5.3.1.3.9
29	E2E Performance (Voice)	No more than 5 ms Latency over any 5-minute period measured under congestion. (R)	5.3.1.4.1
		No more than 3 ms Jitter over any 5-minute period measured under congestion. (R)	
		Packet loss not to exceed engineered (queuing) parameters over any 5-minute period under congestion. (R)	
30	E2E Performance (Video)	No more than 30 ms Latency over any 5-minute period measured under congestion. (R)	5.3.1.4.2
		No more than 30 ms Jitter over any 5-minute period measured under congestion. (R)	
		Packet loss not to exceed engineered (queuing) parameters over any 5-minute period under congestion. (R)	
31	E2E Performance (Data)	No more than 50 ms Latency over any 5-minute period measured under congestion (R)	5.3.1.4.3
		Packet loss not to exceed engineered (queuing) parameters over any 5-minute period under congestion. (R)	
32	LAN Network Management	Configuration Control for ASLAN and non-ASLAN. (R)	5.3.1.6.1
33		Operational Controls for ASLAN and non-ASLAN. (R)	5.3.1.6.2
34		Performance Monitoring for ASLAN and non-ASLAN. (R)	5.3.1.6.3
35		Alarms for ASLAN and non-ASLAN. (R)	5.3.1.6.4
36		Reporting for ASLAN and non-ASLAN. (R)	5.3.1.6.5
37	Redundancy	Redundant Power Supplies. (Required on standalone redundant products.)	5.3.1.7.7
38		Chassis Failover. (Required on standalone redundant products.)	
39		Switch Fabric Failover. (Required on standalone redundant products.)	
40		Non-LACP Link Failover.(R)	
41		Fiber Blade Failover. (R)	
42		Stack Failover. (C) (Required if the stack supports more than 96 users.)	
43		CPU (routing engine) blade Failover. (R)	
44	MPLS	MPLS May not add measurable Loss or Jitter to system. (C)	5.3.1.8.4.1
45		MPLS Conforms to RFCs in Table 5.3.1-14. (C)	5.3.1.8.4.1
46		MPLS Support L2 and L3 VPNs. (C)	5.3.1.8.4.2.1 /2
47	IPv6 Product Requirements: Dual Stack for IPv4 and IPv6 IAW RFC 4213 if routing functions are supported. (C)		5.3.5.4

Table 3. SUT Capability and Functional Requirements (continued)

ID	Requirement (See note.)		UCR Reference
48	IPv6 System Requirements	Support IPv6 IAW RFCs 2460 and 5095 if routing functions are supported. (C)	5.3.5.4
49		Support IPv6 packets over Ethernet IAW RFC2464. (R)	5.3.5.4
50		Support MTU discovery IAW RFC 1981 if routing functions are supported. (C)	5.3.5.4.1
51		Support a minimum MTU of 1280 IAW RFCs 2460 and 5095. (R)	5.3.5.4.1
52		Shall support IPv6 addresses IAW RFC4291. (R)	5.3.5.4.3
53		Shall support IPv6 scoped addresses IAW RFC4007. (R)	5.3.5.4.3
54		if routing functions are supported: If DHCP is supported must be IAW RFC3315, if DHCPv6 is supported it shall be IAW RFC 3313. (C)	5.3.5.4.4
55	IPv6 Router Advertisements	If the system supports routing functions, the system shall inspect valid router advertisements sent by other routers and verify that the routers are advertising consistent information on a link and shall log any inconsistent router advertisements, and shall prefer routers that are reachable over routers whose reachability is suspect or unknown (C).	5.3.5.4.5.2
56		If the system supports routing functions, the system shall include the MTU value in the router advertisement message for all links in accordance with RFC 2461 and RFC 4861. (C)	
57		IPv6 Neighbor Discovery: The system shall not set the override flag bit in the neighbor advertisement message for solicited advertisements for anycast addresses or solicited proxy advertisements. (R)	
58	IPv6 Neighbor Discovery	if routing functions are supported: Neighbor discovery IAW RFCs 2461 and 4861. (C)	5.3.5.4.5
59		The system shall not set the override flag bit in the neighbor advertisement message for solicited advertisements for anycast addresses or solicited proxy advertisements. (R)	
60		The system shall set the override flag bit in the neighbor advertisement message to "1" if the message is not an anycast address or a unicast address for which the system is providing proxy service. (R)	
61	IPv6 SLAAC and Manual Address Assignment	If the system supports stateless IP address Auto-configuration, the system shall support IPv6 SLAAC for interfaces supporting UC functions in accordance with RFC 2462 and RFC 4862.(C)	5.3.5.4.6
62		If the product supports IPv6 SLAAC, the product shall have a configurable parameter that allows the function to be enabled and disabled. (C)	
63		If the product supports IPv6 SLAAC, the product shall have a configurable parameter that allows the "managed address configuration" flag and the "other stateful configuration" flag to always be set and not perform stateless auto-configuration. (C)	
64		If the product supports stateless IP address auto-configuration including those provided for the commercial market, the DAD shall be disabled in accordance with RFC 2462 and RFC 4862.(C)	
65		The system shall support manual assignment of IPv6 addresses. (R)	
66		If the system provides routing functions, the system shall default to using the "managed address configuration" flag and the "other stateful flag" set to TRUE in their router advertisements when stateful auto-configuration is implemented. (C)	
67	IPv6 ICMP	The system shall support the ICMPv6 as described in RFC 4443. (R)	5.3.5.4.7
68		The system shall have a configurable rate limiting parameter for rate limiting the forwarding of ICMP messages. (R)	
69		The system shall support the capability to enable or disable the ability of the system to generate a Destination Unreachable message in response to a packet that cannot be delivered to its destination for reasons other than congestion. (R) Required if LS supports routing functions.	
70		The system shall support the enabling or disabling of the ability to send an Echo Reply message in response to an Echo Request message sent to an IPv6 multicast or anycast address (C). Required if LS supports routing functions.	
71		The system shall validate ICMPv6 messages, using the information contained in the payload, prior to acting on them (C). Required if LS supports routing functions.	
72	IPv6 Routing Functions	If the system supports routing functions, the system shall support the OSPF for IPv6 as described in RFC 2740 (C).	5.3.5.4.8
73		If the system supports routing functions, the system shall support securing OSPF with Internet Protocol Security (IPSec) as described for other IPSec instances in UCR 2008, Section 5.4 (C).	
74		If the system supports routing functions, the system shall support OSPF for IPv6 as described in RFC 2740, router to router integrity using IP authentication header with HMAC-SHA1-96 with ESP and AH as described in RFC 2404, shall support OSPFv3 IAW RFC 4552 (C).	
75		If the system supports routing functions, the system shall support the Multicast Listener Discovery (MLD) process as described in RFC 2710 and extended in RFC 3810 (C).	
76	Site Requirements	Engineering Requirements: Physical Media for ASLAN and non-ASLAN. (R) (Site requirement)	5.3.1.7.1
77		Battery Back up two hours for non-ASLAN components and eight hours for ASLAN components. (R) (Site requirement)	5.3.1.7.5
78		Availability of 99.999 percent (Special C2), and 99.997 percent (C2) for ASLAN (R), and 99.9 percent (non-C2 and C2(R) for non-ASLAN. (R) (Site requirement)	5.3.1.7.6

Table 3. SUT Capability and Functional Requirements (continued)

ID	Requirement (See note.)		UCR Reference																																																																																																
79		Port-Based access Control IAW IEEE 802.1x (R)	5.3.1.3.2																																																																																																
80	IA Security requirements	Secure methods for network configuration. SSH2 instead of Telnet and support RFCs 4251-4254. Must use HTTPS instead of http, and support RFCs 2660 and 2818 for ASLAN and non-ASLAN. (R)	5.3.1.6																																																																																																
81		Security (R)	5.3.1.3.8																																																																																																
82		Must meet IA requirements IAW UCR 2008 Section 5.4 for ASLAN and non-ASLAN. (R)	5.3.1.5																																																																																																
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5. No detailed test report was developed in accordance with the Program Manager's request. JITC distributes interoperability information via the JITC Electronic Report Distribution (ERD) system, which uses Unclassified-But-Sensitive Internet Protocol Router Network (NIPRNet) e-mail. More comprehensive interoperability status information is available via the JITC System Tracking Program (STP). STP is accessible by .mil/gov users on the NIPRNet at <https://stp.fhu.disa.mil>. Test reports, lessons learned, and related testing documents and references are on the JITC Joint Interoperability Tool (JIT) at <http://jit.fhu.disa.mil> (NIPRNet). Due to the sensitivity of the information, the Information Assurance Accreditation Package (IAAP) that contains the approved configuration and deployment guide must be requested directly through government civilian or uniformed military personnel from the Unified Capabilities Certification Office (UCCO), e-mail: disa.meade.ns.list.unified-capabilities-certification-office@mail.mil. All associated data is available on the DISA UCCO website located at <http://www.disa.mil/Services/Network-Services/UCCO>.

JITC Memo, JTE, Extension of the Special Interoperability Test Certification of the Hewlett Packard (HP) A5800 Series with Release 5.20.F1803L03

6. The JITC point of contact is CPT James Torres, DSN 879-5575, commercial (520) 538-5575, FAX DSN 879-4347, or e-mail to james.m.torres.mil@mail.mil. JITC's mailing address is P.O. Box 12798, Fort Huachuca, AZ 85670-2798. The UCCO tracking number for the SUT is 0920505.

FOR THE COMMANDER:



for RICHARD A. MEADOR
Chief
Battlespace Communications Portfolio

Enclosure a/s

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NSG Interoperability Assessment Team
DOT&E, Netcentric Systems and Naval Warfare
Medical Health Systems, JMIS IV&V
HQUSAISEC, AMSEL-IE-IS
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ADDITIONAL REFERENCES

- (c) Office of the Assistant Secretary of Defense, "Department of Defense Unified Capabilities Requirements 2008 Change 1," 22 January 2010
- (d) Joint Interoperability Test Command, "Defense Switched Network Generic Switch Test Plan (GSTP), Change 2," 2 October 2006
- (e) Joint Interoperability Test Command, Memo, JTE, "Special Interoperability Test Certification of the Hewlett Packard (HP) A5800 Series with Release 5.20," 25 March 2011
- (e) Joint Interoperability Test Command, "Information Assurance (IA) Assessment of 3Com S5820/S5800 Release 5.20 (Tracking Number 0920505)," 23 November 2010
- (f) Joint Interoperability Test Command, Memo, JTE, "Special Interoperability Test Certification of the 3Com Switch 5800 Series with Release 5.20," 23 November 2010