DEFENSE INFORMATION SYSTEMS AGENCY
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IN REPLY REFER TO: Joint Interoperability Test Command (JTE) **4 Nov 13**

MEMORANDUM FOR DISTRIBUTION

SUBJECT: Extension of the Special Interoperability Test Certification of the REDCOM High Density Exchange (HDX)™ Local Session Controller (LSC), Software Release 4.0 Revision 3 with Specified Patch Group 7 (4.0AR3P7)

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 (g), see Enclosure

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

2. The REDCOM HDX LSC, Software Release 4.0 Revision 3 with Specified Patch Group 8 (4.0AR3P7) is hereinafter referred to as the System Under Test (SUT). The SUT is certified for joint use in the Defense Information System Network (DISN) as an LSC. The fielding of the SUT is limited to IP version 4 (IPv4) across the DISN. Although the SUT supports Internet Protocol version 6 (IPv6), it was not tested inter-enclave because of test limitations within the network infrastructure. Therefore, inter-enclave IPv6 is not covered under this certification, but intra-enclave use of IPv6 is authorized for use. Any new discrepancy noted in the operational environment will be evaluated for impact on the existing certification. These discrepancies will be adjudicated to the satisfaction of DISA via a vendor Plan of Action and Milestones (POA&M), which will address all new critical Test Discrepancy Reports (TDRs) within 120 days of identification. Testing was conducted using LSC product requirements derived from, Reference (c) and LSC test procedures derived from Reference (d). No other configurations, features, or functions, except those cited within this memorandum, are certified by JITC. This certification expires upon changes that affect interoperability, but no later than 27 March 2015, three years from the date of the original Unified Capabilities Approved Products List memorandum.

3. The extension of this certification is based upon Desktop Review (DTR) 6. The original certification, documented in Reference (e), is based on interoperability testing conducted by JITC, review of the vendor's Letters of Compliance (LoC), and DISA Information Assurance (IA) Certification Authority (CA) approval of the IA configuration. Interoperability testing was conducted by JITC, Fort Huachuca, Arizona, from 8 March through 21 May 2010. Adjudication of open TDRs was completed by DISA on 27 March 2012. Verification and Validation (V&V) testing was conducted from 21 February through 4 March and 7 through 18 November 2011.

Review of the vendor's LoC was completed on 10 November 2011. The DISA CA reviewed the IA Assessment Report for the SUT, Reference (f), and based on the findings in the report has provided a positive recommendation on 20 March 2012. DTR 6 was requested to include V.150.1 modem over Internet Protocol (IP). JITC determined V&V testing was required. The SUT V.150.1 capabilities were retested with Release 4.0AR3P9 during a Multi-Vendor Test Event (MVTE) for V.150.1 from 19 through 30 August 2013. No new interoperability discrepancies were opened and the SUT successfully demonstrated the SUT V.150.1 capabilities during the MVTE. Therefore, JITC approves this DTR without further testing. Additionally, the DISA CA has approved this DTR without further testing. Therefore, the original IA approval applies to this DTR.

4. The interface, Capability Requirements (CR) and Functional Requirements (FR), and component status of the SUT is listed in Tables 1 and 2. The threshold CR/FRs for LSCs are established by Sections 5.3.2, 5.3.4, 5.3.5, and 5.4 of Reference (c) and were used to evaluate the interoperability of the SUT.

Table 1. SUT Interface Interoperability Status

Interface	Critical	UCR Reference	Threshold CR/FR (See note 1.)	Status	Remarks (See note 2.)
Line Interfaces					
10Base-X	Yes	5.3.2.6.3	2, 4, 10, 13, 16	Certified	Met threshold CRs/FRs for IEEE 802.3i and 802.3j. Applies to PEIs (voice only).
100Base-X	Yes	5.3.2.6.3	2, 4, 10, 13, 16	Certified	Met threshold CRs/FRs for IEEE 802.3u. Applies to PEIs (voice only).
1000Base-X	No	5.3.2.6.3	2, 4, 10,13, 16	Not Tested	This interface is not offered by the SUT.
2-wire analog	Yes	5.3.2.6.1.6	2, 4, 10, 13,	Certified	Met threshold CRs/FRs for 2-wire analog instruments. Applies to 2-wire secure and non-secure analog instruments, fax, and modem.
BRI	No	5.3.2.6.1.8	2, 4, 10, 13	Certified	Met threshold CRs/FRs for BRI instruments. Applies to voice and clearmode data.
External Interfaces					
10Base-X	No (See note 3.)	5.3.2.4.2	1, 2, 3, 6, 7, 8, 10, 11, 13, 15, 16	Certified	Met threshold CRs/FRs for IEEE 802.3i and 802.3j. Applies to AS-SIP trunk.
100Base-X	No (See note 3.)	5.3.2.4.2	1, 2, 3, 6, 7, 8, 10, 11, 13, 15, 16	Certified	Met threshold CRs/FRs for IEEE 802.3u. Applies to AS-SIP trunk.
1000Base-X	No (See note 3.)	5.3.2.4.2	1, 2, 3, 6, 7, 8, 10, 11, 13, 15, 16	Not Tested	This interface is not offered by the SUT.
ISDN T1 PRI NI-2 (ANSI T1.619a)	Yes	5.3.2.4.3	2, 3, 7, 8, 10, 13	Certified	Met threshold CRs/FRs. Provides legacy DSN and TELEPORT connectivity.
ISDN T1 PRI NI-2 (ANSI T1.607)	Yes	5.3.2.4.3	2, 3, 7, 8, 10, 13	Certified	Met threshold CRs/FRs. Provides PSTN Connectivity
T1 CCS7 ANSI T1.619a	No	5.3.2.12.9	2 , 3, 7, 8, 10, 13	Not Tested	This interface is offered by the SUT; however, it was not tested.
T1 CAS (DP, DTMF, MFR1)	No	5.3.2.12.11	2, 3, 7, 8, 10, 13	Certified	Met threshold CRs/FRs for T1 CAS.

Table 1. SUT Interface Interoperability Status

Interface	Critical	UCR Reference	Threshold CR/FR (See note 1.)	Status	Remarks (See note 2.)
External Interfaces (continued)					
E1 CAS (DP, DTMF, MFR1)	No	5.3.2.12.11	2, 3, 7, 8, 10, 13	Certified	Met threshold CRs/FRs for T1 CAS.
E1 PRI ITU-T Q.955.3	No (See note 4.)	5.3.2.12.10	2, 3, 7, 8, 10, 13	Certified	Met threshold CRs/FRs for E1 PRI ITU-T Q.955.3. Provides Legacy DSN connectivity in Europe.
E1 PRI ITU-T Q.931	No (See note 4.)	5.3.2.12.10	2, 3, 7, 8, 10, 13	Certified	Met threshold CRs/FRs for E1 PRI ITU-T Q.931. Provides PSTN connectivity in Europe.
NM					
10Base-X	No (See note 3.)	5.3.2.4.4 5.3.2.7.2.8	16, 17	Certified	Met threshold CRs/FRs. Verified via LoC.
100Base-X	No (See note 3.)	5.3.2.4.4 5.3.2.7.2.8	16, 17	Certified	Met threshold CRs/FRs. Verified via LoC.

NOTES:
1. The SUT high-level CR and FR ID numbers depicted in the Threshold CRs/FRs column can be cross-referenced in Table 2. These high-level CR/FR requirements refer to a detailed list of requirements provided in Reference (e), Enclosure 3.
2. Detailed information pertaining to open TDRs and associated operational impacts is in Reference (e), Enclosure 2, paragraph 11.
3. The SUT must provide a minimum of one of the listed interfaces.
4. This interface is conditionally required for deployment in Europe.

LEGEND:

ANSI	American National Standards Institute
AS-SIP	Assured Services Session Initiation Protocol
BRI	Basic Rate Interface
CAS	Channel Associated Signaling
CCS7	Common Channel Signaling 7
CR	Capability Requirement
DP	Dial Pulse
DSN	Defense Switched Network
DSS1	Digital Subscriber Signaling 1
DTMF	Dual Tone Multi-Frequency
E1	European Basic Multiplex Rate (2.048 Mbps)
FR	Functional Requirement
ID	Identification
IEEE	Institute of Electrical and Electronics Engineers
ISDN	Integrated Services Digital Network
ITU-T	International Telecommunication Union – Telecommunication Standardization Sector
LoC	Letter of Compliance
Mbps	Megabits per second
MFR1	Multi-Frequency Recommendation 1
MLPP	Multi-Level Precedence and Preemption
NI-2	National ISDN-2
NM	Network Management
PEI	Proprietary End Instrument
PRI	Primary Rate Interface
PSTN	Public Switched Telephone Network
Q.931	Signaling Standard for ISDN
Q.955.3	ISDN Signaling Standard for E1 MLPP
SS7	Signaling System 7
SUT	System Under Test
T1	Digital Transmission Link Level 1 (1.544 Mbps)
T1.607	ISDN – Layer 3 Signaling Specification For Circuit Switched Bearer Service For DSS1
T1.619a	SS7 and ISDN MLPP Signaling Standard For T1
TDR	Test Discrepancy Report
UCR	Unified Capabilities Requirements

Table 2. SUT CR and FR Status

CR/FR ID	Capability/Function	Applicability (See note 1.)	UCR Reference	Status
1	**Assured Services Product Features and Capabilities**			
	DSCP Packet Marking	Required	5.3.2.2.1.4	Met (See note 2.)
	Voice Features and Capabilities	Required	5.3.2.2.2.1	Met (See notes 3, 4, 5.)
	Public Safety Features	Required	5.3.2.2.2.2	Met
	ASAC – Open Loop	Required	5.3.2.2.2.3	Met (See note 6.)
	Signaling Protocols	Required	5.3.2.2.3	Met
	Signaling Performance	Conditional	5.3.2.2.4	Met

Table 2. SUT CR and FR Status (continued)

CR/FR ID	Capability/Function	Applicability (See note 1.)	UCR Reference	Status
2	**Registration, Authentication, and Failover**			
	Registration	Required	5.3.2.3.1	Met
	Failover	Required	5.3.2.3.2	Met (See note 7.)
3	**Product Physical, Quality, and Environmental Factors**			
	Availability	Required	5.3.2.5.2.1	Met
	Maximum Downtimes	Required	5.3.2.5.2.2	Met
	Loss of Packets	Required	5.3.2.5.4	Met
4	**Voice End Instruments**			
	Tones and Announcements	Required	5.3.2.6.1.1	Met
	Audio Codecs	Required	5.3.2.6.1.2	Partially Met (See note 8.)
	VoIP PEI or AEI Audio Performance	Required	5.3.2.6.1.3	Partially Met (See note 9.)
	VoIP Sampling Standard	Required	5.3.2.6.1.4	Met
	Authentication to LSC	Required	5.3.2.6.1.5	Met
	Analog Telephone Support	Required	5.3.2.6.1.6	Met
	Softphones	Conditional	5.3.2.6.1.7	Not Tested (See note 10.)
	ISDN BRI	Conditional	5.3.2.6.1.8	Met
5	**Video End Instruments**			
	Video End Instrument	Required	5.3.2.6.2	Not Met (See note 11.)
	Display Messages, Tones, and Announcements	Required	5.3.2.6.2.1	Not Met (See note 11.)
	Video Codecs (Including Associated Audio Codecs)	Required	5.3.2.6.2.2	Not Met (See note 11.)
6	**LSC Requirements**			
	PBAS/ASAC Requirements	Required	5.3.2.7.2.1	Met
	Calling Number Delivery Requirements	Required	5.3.2.7.2.2	Met
	LSC Signaling Requirements	Required	5.3.2.7.2.3	Met
	Service Requirements under Total Loss of WAN Transport	Required	5.3.2.7.2.4	Met
	Local Location Server and Directory	Required	5.3.2.7.2.5	Met
	LSC Transport Interface Functions	Required	5.3.2.7.2.7	Met
	LSC to PEI, AEI, and Operator Console Status Verification	Required	5.3.2.7.2.10	Partially Met (See note 12.)
	Line-Side Custom Features Interference	Conditional	5.3.2.7.2.11	Not Tested (See note 13.)
	Loop Avoidance	Required	5.3.2.7.3	Met
7	**Call Connection Agent Requirements**			
	CCA IWF Component	Required	5.3.2.9.2.1	Met
	CCA MGC Component	Required	5.3.2.9.2.2	Met
	SG Component	Conditional	5.3.2.9.2.3	Not Tested (See note 13.)
	CCA-IWF Support for AS-SIP	Required	5.3.2.9.5.1	Met
	CCA-IWF Support for SS7	Conditional	5.3.2.9.5.2	Not Tested (See note 13.)
	CCA-IWF Support for PRI via MG	Required	5.3.2.9.5.3	Met
	CCA-IWF Support for CAS Trunks via MG	Conditional	5.3.2.9.5.4	Not Tested (See note 13.)
	CCA-IWF Support for PEI and AEI Signaling Protocols	Required	5.3.2.9.5.5	Met

Table 2. SUT CR and FR Status (continued)

CR/FR ID	Capability/Function	Applicability (See note 1.)	UCR Reference	Status
7	**Call Connection Agent Requirements (continued)**			
	CCA-IWF Support for VoIP and TDM Protocol Interworking	Required	5.3.2.9.5.6	Met
	CCA Preservation of Call Ringing State during Failure Conditions	Required	5.3.2.9.6	Met
	CCA Interactions with Transport Interface Functions	Required	5.3.2.10.3	Met
	CCA Interactions with the EBC	Required	5.3.2.10.4	Met
	CCA Support for Admission Control	Required	5.3.2.10.5	Met
	CCA Support for UFS	Required	5.3.2.10.6	Met
	CCA Support for IA	Required	5.3.2.10.7	Met
	CCA Interaction with EIs	Required	5.3.2.10.10	Met
	CCA Support for AS Voice and Video	Required	5.3.2.10.11	Partially Met (See note 11.)
	CCA Interactions with Service control Functions	Required	5.3.2.10.12	Met
	CCA Interworking between AS-SIP and SS7	Conditional	5.3.2.11	Not Tested (See note 13.)
8	**MG Requirements**			
	Role of MG In LSC	Required	5.3.2.12.3.1	Partially Met (See note 14.)
	MG Support for ASAC	Required	5.3.2.12.4.1	Met
	MG and IA Functions	Required	5.3.2.12.4.2	Met
	MG Interaction with Service Control Function	Required	5.3.2.12.4.3	Met
	MG Interactions with IP Transport Interface Functions	Required	5.3.2.12.4.4	Met
8	**MG Requirements (continued)**			
	MG-EBC interactions	Required	5.3.2.12.4.5	Met
	MG IP-Based PSTN Interface Requirements	Conditional	5.3.2.12.4.7	Not Tested (See note 13.)
	MG Interaction with EIs	Required	5.3.2.12.4.8	Met
	MG support for User Features and Services	Required	5.3.2.12.4.9	Met
	MG Interface to TDM	Required	5.3.2.12.5	Met
	MG Interface to TDM Allied and Coalition	Conditional	5.3.2.12.6	Not Tested (See note 13.)
	MG Interface to TDM PSTN in US	Required	5.3.2.12.7	Met
	MG Interfaces to TDM PSTN OCONUS	Required	5.3.2.12.8	Met
	MG Support for CCS7	Conditional	5.3.2.12.9	Not Tested (See note 13.)
	MG Support for ISDN PRI Trunks	Required	5.3.2.12.10	Met
	MG Support for CAS Trunks	Conditional	5.3.2.12.11	Met
	MG requirements for VoIP Internal Interfaces	Required	5.3.2.12.12	Met (See note 14.)
	MG Echo Cancellation	Required	5.3.2.12.13	Met
	MG Clock Timing	Required	5.3.2.12.14	Met
	MGC-MG CCA Functions	Required	5.3.2.12.15	Met
	MG ITU-T V.150.1	Required	5.3.2.12.16	Met (See note 15.)
	MG Preservation of Call Ringing during Failure	Required	5.3.2.12.17	Met
9	**SG Requirements**			
	SG and CCS7 network Interactions	Conditional	5.3.2.13.5.1	Not Tested (See note 13.)
	SG Interactions with CCA	Conditional	5.3.2.13.5.2	Not Tested (See note 13.)
	SG Interworking Functions	Conditional	5.3.2.13.5.3	Not Tested (See note 13.)

Table 2. SUT CR and FR Status (continued)

CR/FR ID	Capability/Function	Applicability (See note 1.)	UCR Reference	Status
10	**WWNDP Requirements**			
	WWNDP	Required	5.3.2.16	Met
	DSN WWNDP	Required	5.3.2.16.1	Met
11	**Commercial Cost Avoidance**			
	Commercial Cost Avoidance	Required	5.3.2.23	Met (See notes 16 and 17.)
12	**AS-SIP Based for External Devices (Voicemail, Unified Messaging, and Automated Receiving Devices)**			
	AS-SIP Requirements for External Interfaces	Conditional	5.3.2.24	Not Tested (See note 13.)
13	**Precedence Call Diversion**			
	Precedence Call Diversion	Required	5.3.2.25	Met
14	**Attendant Station Features**			
	Precedence and Preemption	Required	5.3.2.26.1	Met (See note 18.)
	Call Display	Required	5.3.2.26.2	Met (See note 18.)
	Class of Service Override	Required	5.3.2.26.3	Met (See note 18.)
	Busy Override and Busy Verification	Required	5.3.2.26.4	Met (See note 18.)
	Night service	Required	5.3.2.26.5	Met (See note 18.)
	Automatic Recall of Attendant	Required	5.3.2.26.6	Met (See note 18.)
	Calls in Queue to the Attendant	Required	5.3.2.26.7	Met (See note 18.)
CR/FR ID	**Capability/Function**	**Applicability (See note 1.)**	**UCR Reference**	**Status**
15	**AS-SIP Requirements**			
	SIP Requirements for AS-SIP Signaling Appliances and AS-SIP EIs	Required	5.3.4.7	Met
	SIP Session Keep-Alive Timer	Required	5.3.4.8	Met
	Session Description Protocol	Required	5.3.4.9	Met
	Precedence and Preemption	Required	5.3.4.10	Met
	Video Telephony – General Rules	Required	5.3.4.12	Not Met (See note 11.)
	Calling Services	Required	5.3.4.13	Met
	SIP Translation Requirements for Inter-working AS-SIP Signaling Appliances	Required	5.3.4.14	Met
	Relevant Timers for the Terminating Gateway and the Originating Gateway	Required	5.3.4.15	Met
	SIP Requirements for Interworking AS-SIP Signaling Appliances	Required	5.3.4.16	Met
	Keep-Alive Timer Requirements for Interworking AS-SIP Signaling Appliances	Required	5.3.4.17	Met
	Precedence and Preemption Extensions for Interworking AS-SIP Signaling Appliances	Required	5.3.4.18	Met
	Supplementary Services	Required	5.3.4.19	Partially Met (See note 3.)
16	**IPv6 Requirements**			
	Product Requirements	Required	5.3.5.4	Met (See note 19.)

Table 2. SUT CR and FR Status (continued)

CR/FR ID	Capability/Function	Applicability (See note 1.)	UCR Reference	Status
17	**NM**			
	LSC Management Function	Required	5.3.2.7.2.6	Met
	VVoIP NMS Interface Requirements	Required	5.3.2.4.4	Met
	General Management requirements	Required	5.3.2.17.2	Met
	Requirement for FCAPS Management	Required	5.3.2.17.3	Met
	NM requirements of Appliance Functions	Required	5.3.2.18	Met (See note 20.)
	Accounting Management	Required	5.3.2.19	Met (See note 20.)

NOTES:

1. The annotation of 'required' refers to a high-level requirement category. The applicability of each sub-requirement is provided in Reference (e), Enclosure 3.
2. The SUT correctly classmarks calls based on the precedence level dialed; however, the DSCP values are not configurable from 0-63 as required by UCR 2008, Change 2. The TEO dual-stack IPv6 preferred IP phone tags outgoing voice media packets with a DSCP value of 49 (routine) for all precedence levels. This discrepancy was fixed and successfully tested with DTR 3, which included an update on the TEO firmware from version 05.04.11 to 05.04.13.
3. During the original interoperability testing, the SUT met all critical CRs & FRs with one minor exception: In a 3-way conference, the SUT did not classmark the conference at the highest precedence level of each leg of the conference. This was adjudicated by DISA as having a minor operational impact with a vendor POA&M to fix. This discrepancy was fixed and successfully tested with DTR 1, which included an update on the SUT from version 4.0AR3P7 to 4.0AR3P8.
4. The SUT experiences one way audio when an IP or analog EI places a call to another switch on hold. During the DTR 3 V&V test, testers verified that the one-way audio discrepancy is caused by another switch and not the SUT. The SUT drops the call when a BRI EI places a call to another switch on hold. These issues do not occur if the other switch places the call on hold. This discrepancy was fixed and successfully tested with DTR 3, which included an update on the SUT from version 4.0AR3P8 to 4.0AR3P9.
5. The SUT attended transfer calls fail. The first two legs of the call are established and the analog EI can hook flash back and forth between the parties; however, when the attended transfer is attempted by the analog EI hanging up, the attended transfer fails. Although the vendor had previously submitted a POA&M to correct this, testers verified that this discrepancy was caused by another switch and not the SUT.
6. During the original interoperability testing, the SUT did not support separate ASAC counts for video and voice. This was adjudicated by DISA as having a minor operational impact with a vendor POA&M to fix. This discrepancy was fixed and successfully tested with DTR 1, which included an update on the SUT from version 4.0AR3P7 to 4.0AR3P8.
7. The SUT did not initially support the LSC failover requirements in UCR 2008, Change 2, paragraph 5.3.2.3.2, but demonstrated compliance during DTR 2 testing. DISA NS2 supported a multi-vendor failover test event at JITC from 8 through 19 October 2012 to newly drafted failover requirements in the UCR. The SUT met these new requirements, which will be included in the next version of the UCR (UCR 2013).
8. The SUT does not support ITU-T G.722.1 voice codec. This was adjudicated by DISA as having a minor operational impact. DISA stated this requirement will be changed to conditional in the next UCR.
9. The SUT only supports voice PEIs. The vendor did not support AEI voice capability. This was adjudicated by DISA to have a minor operational impact since there were no certified AEI video end instruments on the UC APL.
10. The vendor did not provide soft phones with the SUT for interoperability testing; therefore, they were not tested. Soft phones are a conditional requirement.
11. The SUT offers video; however, it is not covered under this certification. JITC only conducted limited video testing on the SUT with Polycom video EIs. Due to the fact that their video EI is not IPv6 capable and did not offer a GA load it did not meet this requirement. This was adjudicated by DISA as having a minor operational impact with a vendor POA&M. The SUT is not certified for use with video EIs.
12. The SUT does not comply with the requirement to be configurable to set interval times to verify status of its IP EI's with the default set at five minutes. This was adjudicated by DISA as having a minor operational impact with the intent to change the requirement to conditional in next UCR update.
13. This is a conditional requirement and was not tested.
14. The SUT met this requirement with VoIP PEIs only.
15. During the original interoperability testing, the SUT did not fully comply with the requirements for ITU-T V.150.1. For FAX (ITU-T T.38 transitions) the LSC maintains the session protocol (UDP). However, the port is changed when moving from VoIP to FoIP. The LSC sends a REINVITE (per MGC transitioning rules) with the new port number; therefore, SIP compliant devices (including the EBC) should follow the port change. The port selection is currently configurable for MoIP because MoIP does not use the REINVITE method for transition. This was adjudicated by DISA as having a minor operational impact with a vendor POA&M to fix. This discrepancy was fixed and successfully tested with DTR 1, which included an update on the SUT from version 4.0AR3P7 to 4.0AR3P8. Additionally, the SUT V.150.1 capabilities were retested with Release 4.0AR3P9 during a Multi-Vendor Test Event (MVTE) for V.150.1 from 19 through 30 August 2013 and the SUT demonstrated full compliance.

Table 2. SUT CR and FR Status (continued)

NOTES (continued):

16. During the original interoperability testing, the SUT did not support LDAP V3 for CCA. Transition to the LDAP format was in progress and was expected to be functional by late June 2011. This was adjudicated by DISA as having a minor operational impact with a vendor POA&M to fix. This discrepancy was fixed and successfully tested with DTR 1, which included an update on the SUT from version 4.0AR3P7 to 4.0AR3P8.
17. The vendor submitted an LoC with the following discrepancy: The SUT does not support the Commercial Cost Avoidance LDAP database keep-alive messaging format IAW UCR 2008, Change 2, section 5.3.2.28.5.2.5. The vendor states the frequency of the keep-alive messages is too frequent. DISA adjudicated this as minor and stated their intent to change the requirement in UCR 2013.
18. The attendant console requirements were met with the Link Command System with software version 5.02, which was included in DTR 5.
19. The vendor submitted an IPv6 LoC with noted discrepancies which include: The SUT is not fully compliant with IPv6 neighbor discovery IAW RFC 4861. This was adjudicated by DISA as having a minor operational impact with a vendor POA&M. This discrepancy was fixed and successfully tested with DTR 1, which included an update on the SUT from version 4.0AR3P7 to 4.0AR3P8.
20. During the original interoperability testing, the vendor submitted an NM LoC with the following noted discrepancies: The SUT does not fully comply with the CDR and QoS requirements per UCR 2008, Change 2, section 5.3.2.19.2.1.x. This discrepancy was fixed and successfully tested with DTR 1, which included an update on the SUT from version 4.0AR3P7 to 4.0AR3P8. The SUT does not comply with the Management Requirements for ASAC per UCR 2008, Change 2, section 5.3.2.18.2. This discrepancy was fixed and successfully tested with DTR 3, which included an update on the SUT from version 4.0AR3P8 to 4.0AR3P9.

LEGEND:

AEI	AS-SIP End Instrument
APL	Approved Products List
AS	Assured Services
ASAC	Assured Services Admission Control
AS-SIP	Assured Services Session Initiation Protocol
BRI	Basic Rate Interface
CAS	Channel Associated Signaling
CCA	Call Connection Agent
CCS7	Common Channel Signaling 7
CDR	Call Detail Records
CR	Capabilities Requirement
DISA	Defense Information Systems Agency
DSCP	Differentiated Services Code Point
DSN	Defense Switched Network
DTR	Desktop Review
EBC	Edge Boundary Controller
EI	End Instrument
FCAPS	Fault, Configuration, Accounting, Performance, and Security
FoIP	Fax over Internet Protocol
FR	Functional Requirement
GA	General Available
HDX	High Density Exchange
IA	Information Assurance
IAW	in accordance with
ID	Identification
IP	Internet Protocol
IPv6	Internet Protocol version 6
ISDN	Integrated Services Digital Network
ITU-T	International Telecommunication Union - Telecommunication Standardization Sector
IWF	Interworking Function
JITC	Joint Interoperability Test Command
LDAP	Lightweight Directory Access Protocol
LoC	Letter of Compliance
LSC	Local Session Controller
MG	Media Gateway
MGC	Media Gateway Controller
MoIP	Modem over Internet Protocol
NM	Network Management
NMS	Network Management System
OCONUS	Outside the Continental United States
PBAS	Precedence-Based Assured Service
PEI	Proprietary End Instrument
POA&M	Plan of Actions and Milestones
PRI	Primary Rate Interface
PSTN	Public Switched Telephone Network
QoS	Quality of Service
RFC	Request for Comments
SG	Signaling Gateway
SIP	Session Initiation Protocol
SS7	Signaling System Number 7
SUT	System Under Test
TDM	Time Division Multiplexing
UC	Unified Capabilities
UCR	Unified Capabilities Requirements
UDP	User Datagram Protocol
UFS	User Features and Services
V&V	Verification and Validation
VoIP	Voice over Internet Protocol
VVoIP	Voice and Video over Internet Protocol
WAN	Wide Area Network
WWNDP	World Wide Numbering and Dialing Plan

5. JITC distributes interoperability information via the JITC Electronic Report Distribution (ERD) system, which uses Sensitive but Unclassified IP Data (formerly known as NIPRNet) e-mail. Interoperability status information is available via the JITC System Tracking Program (STP). STP is accessible by .mil/.gov users 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 https://jit.fhu.disa.mil/. 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 from the Unified Capabilities Certification Office (UCCO), e-mail: disa.meade.ns.list.unified-capabilities-certification-office@mail.mil. All associated information is available on the DISA UCCO website located at http://www.disa.mil/Services/Network-Services/UCCO.

6. The JITC point of contact is Mr. Cary Hogan, DSN 879-2589, commercial (520) 538-2589, FAX DSN 879-4347, or e-mail to cary.v.hogan.civ@mail.mil. JITC's mailing address is P.O. Box 12798, Fort Huachuca, AZ 85670-2798. The UCCO tracking number for the SUT is 0932802.

FOR THE COMMANDER:

Enclosure a/s

for RICHARD A. MEADOR
Chief
Battlespace Communications Portfolio

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ADDITIONAL REFERENCES

(c) Office of the Assistant Secretary of Defense, "Department of Defense Unified Capabilities Requirements 2008, Change 2," 31 December 2010

(d) Joint Interoperability Test Command, "Unified Capabilities Test Plan (UCTP)," Draft

(e) Joint Interoperability Test Command, Memo, JTE, "Special Interoperability Test Certification of the REDCOM High Density Exchange (HDX)™ Local Session Controller (LSC), Software Release 4.0 Revision 3 with Specified Patch Group 7 (4.0AR3P7)," 30 March 2012

(f) Joint Interoperability Test Command, "Information Assurance (IA) Assessment of REDCOM HDX™ Local Session Controllers, Version 4.0AR3 (TN# 0932802)," Draft

(g) Joint Interoperability Test Command, "Information Assurance (IA) Assessment of REDCOM High Density Exchange (HDX) Release (Rel.) 4.0AR3P8 (Tracking Number 0932802)," Draft