



DEFENSE INFORMATION SYSTEMS AGENCY

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

21 May 13

MEMORANDUM FOR DISTRIBUTION

SUBJECT: Extension of the Special Interoperability Test Certification of the Avaya CS2100 XA-Core SE09.1 –Aura® Application Server (AS) 5300 Version 2.0 Multifunction Softswitch (MFSS) (with specified patch releases) from Patch Bundle 23 to Patch Bundle 28

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 Joint Interoperability Test Command (JITC), as the responsible organization for interoperability test certification.
2. The Avaya CS2100 XA-Core SE09.1 - Aura® AS 5300 Version 2.0 MFSS (with specified patch releases), hereinafter referred to as the System Under Test (SUT) was originally certified as a MFSS (TN 0903501), Reference (c). The vendor submitted a Desktop Review (DTR) to update the SUT software from Patch Bundle 23 to Patch Bundle 28 to resolve interoperability issues that were identified in the operational environment. Patch Bundle 28 is a rollup of all the fixes in Patch Bundles 24, 25, 26, 27, and 28. JITC conducted testing using product requirements derived from the Unified Capabilities Requirements (UCR), Reference (d) and test procedures, Reference (e). The SUT’s certification status will be evaluated during operational deployment. 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 Defense Information Systems Agency (DISA) via a vendor Plan of Action & Milestones (PoAM), which will address all new critical Test Discrepancy Reports (TDRs) within 120 days of identification. JITC does not certify any other configurations, features, or functions, except those cited in this memorandum, or authorized by the Program Management Office. This certification expires upon changes that affect interoperability, but no later than three years from 1 September 2010, which is the date the SUT was posted on the Unified Capabilities (UC) Approved Products List (APL).
3. JITC approves the extension of this certification for DTR 20 submitted to add Patch Bundle 28. All the interoperability fixes in Patch Bundle 28 were regression tested by JITC, Fort Huachuca, Arizona, from 15 through 18 January 2013. Release notes for the Patch Bundles can be found on the Approved Products List Integrated Tracking System (APLITS). As decided as part of the TDR adjudication, the SUT will be retired from the UC APL immediately after the UC APL memorandum including Patch Bundle 28 is posted.

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JITC determined this DTR would require interoperability and Information Assurance (IA) Verification and Validation (V&V) testing. JITC conducted DTR testing from 15 through 18 January 2013. There were no new interoperability discrepancies found during testing for this DTR. The six interoperability discrepancies mentioned in the subparagraphs below were closed as a result of this V&V test.

- a. The SUT softphones on Microsoft Vista and Windows 7 platforms did not properly support Differentiated Services Code Point (DSCP) tagging.
- b. The SUT to Avaya Media Application Server (MAS) video calls did not complete.
- c. Any interswitch attended call transfers failed with the SUT transferring the call.
- d. All call features (transfer, conference, three-way call, etc) involving an Internet Protocol version 6 (IPv6) preferred End Instrument (EI) experienced one-way audio (no receive) at the IPv6 preferred EI for approximately 20-30 seconds at the IPv6 EI after the called party answers.
- e. There was only one-way audio after a call was transferred from an analog EI to an Internet Protocol (IP) EI on the SUT.
- f. The SUT did not properly failover to the secondary Provisional Server (PROV) when the Transport Layer Security (TLS) was lost between the primary PROV and MAS, which caused intermittent call failures.

The DISA CA provided a positive recommendation for these DTRs on 16 April 2013, based on the security testing completed DISA-led IA test teams and published in a separate report, Reference (f). Therefore, JITC approves this DTR.

4. Table 1 depicts the SUT summary. Table 2 lists the interface status of the SUT. Table 3 lists the Capability Requirements (CR) and Functional Requirements (FR), and component status of the SUT. The threshold CR and FR for MFSSs are established by Sections 5.3.2, 5.3.4, 5.3.5, and 5.4 of Reference (d) and were used to evaluate the interoperability of the SUT.

Table 1. Tested System Configurations

SUT Multi-Function Softswitch		
Avaya AS 5300	AS 5300 Release 2.0 with Patch Bundle 28 Load: MCP_13.0.0.0_2010-05-05-2108 Patch: MCP_13.0.0.28_2012-11-21-1436	
Avaya CS2100	Succession Enterprise (SE) 09.1 (Refer to the APL listing for the CS2100 to get a description of SUT components.)	
SUT Components		
Switch Expert		
Part Number	Part Description	Firmware/Software
NTVW02DP	AS 5300 R2.0 Switch Expert MFSS Software CD	Version 7.0, Build 360
NTVW02DQ	AS 5300 R2.0 Switch Expert Small Package Software CD	Version 7.0, Build 360
NTVW02DN	AS 5300 Release 2.0 Switch Expert MFSS Package	Version 7.0, Build 360
NTVW02DO	AS 5300 Release 2.0 Switch Expert Small Package	Version 7.0, Build 360

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Table 1. Tested System Configurations (continued)

SIP Core OAM&P		
Part Number	Part Description	Firmware/Software
NTVW02AD	AS 5300 Release 2.0 SIP Core New System Software Package	Load: MCP_13.0.0.5_2010-10-07-1208 Patch: MCP_13.0.0.28_2012-11-21-1436 Oracle version: 10.2.0.4.0, patch level 28
NTVW02AF	AS 5300 R1.0 to R2.0 Upgrade w/SRS PrePaid	Load: MCP_13.0.0.5_2010-10-07-1208 Patch: MCP_13.0.0.28_2012-11-21-1436 Oracle version: 10.2.0.4.0, patch level 28
NTVW02AG	AS 5300 R1.0 to R2.0 Upgrade and Expansions	Load: MCP_13.0.0.5_2010-10-07-1208 Patch: MCP_13.0.0.28_2012-11-21-1436 Oracle version: 10.2.0.4.0, patch level 28
NTVW02DE	AS 5300 Release 2.0 OS Software Kit - CDROM and DVD	Version: 13.0.36
NTVW02DD	AS 5300 Release 2.0 Core Apps Software Kit CDROM and DVD	Load: MCP_13.0.0.5_2010-10-07-1208 Patch: MCP_13.0.0.28_2012-11-21-1436 Oracle version: 10.2.0.4.0, patch level 28
SIP Core SS Session Manager		
Part Number	Part Description	Firmware/Software
NTVW02AD	AS 5300 Release 2.0 SIP Core New System Software Package	Load: MCP_13.0.0.5_2010-10-07-1208 Patch: MCP_13.0.0.28_2012-11-21-1436 Oracle version: 10.2.0.4.0, patch level 28
NTVW02AF	AS 5300 R1.0 to R2.0 Upgrade w/SRS PrePaid	Load: MCP_13.0.0.0_2010-05-05-2108 Patch: MCP_13.0.0.28_2012-11-21-1436 Oracle version: 10.2.0.4.0, patch level 28
NTVW02AG	AS 5300 R1.0 to R2.0 Upgrade and Expansions	Load: MCP_13.0.0.5_2010-10-07-1208 Patch: MCP_13.0.0.28_2012-11-21-1436 Oracle version: 10.2.0.4.0, patch level 28
NTVW02DE	AS 5300 Release 2.0 OS Software Kit - CDROM and DVD	Version: 13.0.36
NTVW02DD	AS 5300 Release 2.0 Core Apps Software Kit CDROM and DVD	Load: MCP_13.0.0.5_2010-10-07-1208 Patch: MCP_13.0.0.28_2012-11-21-1436 Oracle version: 10.2.0.4.0, patch level 28
SIP Core LSC Session Manager		
Part Number	Part Description	Firmware/Software
NTVW02AD	AS 5300 Release 2.0 SIP Core New System Software Package	Load: MCP_13.0.0.5_2010-10-07-1208 Patch: MCP_13.0.0.28_2012-11-21-1436 Oracle version: 10.2.0.4.0, patch level 28
NTVW02AF	AS 5300 R1.0 to R2.0 Upgrade w/SRS PrePaid	Load: MCP_13.0.0.0_2010-05-05-2108 Patch: MCP_13.0.0.28_2012-11-21-1436 Oracle version: 10.2.0.4.0, patch level 28
NTVW02AG	AS 5300 R1.0 to R2.0 Upgrade and Expansions	Load: MCP_13.0.0.5_2010-10-07-1208 Patch: MCP_13.0.0.28_2012-11-21-1436 Oracle version: 10.2.0.4.0, patch level 28
NTVW02DE	AS 5300 Release 2.0 OS Software Kit - CDROM and DVD	Version: 13.0.36 Patch to: 13.0.36
NTVW02DD	AS 5300 Release 2.0 Core Apps Software Kit CDROM and DVD	Load: MCP_13.0.0.5_2010-10-07-1208 Patch: MCP_13.0.0.28_2012-11-21-1436 Oracle version: 10.2.0.4.0, patch level 28

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Table 1. Tested System Configurations (continued)

Media Application Server			
Part Number	Part Description	Firmware/Software	
NTVW02AE	AS 5300 Release 2.0 MAS New System Software Package	Version: 6.6.0.99	
NTVW02AF	AS 5300 R1.0 to R2.0 Upgrade w/SRS PrePaid	Version: 6.6.0.99	
NTVW02AG	AS 5300 R1.0 to R2.0 Upgrade and Expansions	Version: 6.6.0.99	
NTVW02DF	AS 5300 Rls 2.0 MAS Base and Applications	Version: 6.6.0.99	
NTVW02DE	AS 5300 Release 2.0 OS Software Kit - CDROM and DVD	Version: 13.0.36	
Audiocodes PRI Gateway			
Part Number	Part Description	Firmware/Software	
NTVW02CF	AS 5300 Release 2.0 Audiocodes M3K PRI GW 8 Span Bundle DC	Version: 5.80A.061	
NTVW02CG	AS 5300 Release 2.0 Audiocodes M3K PRI GW 8 Span Bundle AC	Version: 5.80A.061	
NTVW02CH	AS 5300 Release 2.0 Audiocodes M3K PRI GW 12 Span Bundle DC	Version: 5.80A.061	
NTVW02CI	AS 5300 Release 2.0 Audiocodes M3K PRI GW 12 Span Bundle AC	Version: 5.80A.061	
NTVW02CJ	AS 5300 Release 2.0 Audiocodes M3K PRI GW 16 Span Bundle DC	Version: 5.80A.061	
NTVW02CK	AS 5300 Release 2.0 Audiocodes M3K PRI GW 16 Span Bundle AC	Version: 5.80A.061	
NTVW02CL	AS 5300 Release 2.0 Audiocodes M3K PRI GW 42 Span Bundle DC	Version: 5.80A.061	
NTVW02CM	AS 5300 Release 2.0 Audiocodes M3K PRI GW 42 Span Bundle AC	Version: 5.80A.061	
NTVW02DG	AS 5300 Release 2.0 Audiocodes M3K PRI GW Software CD	Version: 5.80A.061	
NTVW02CN	AS 5300 Release 2.0 Audiocodes M3K PRI GW OC3 Bundle DC	Version: 5.80A.061	
NTVW02CO	AS 5300 Release 2.0 Audiocodes M3K PRI GW OC3 Bundle AC	Version: 5.80A.061	
NTVW02DH	AS 5300 Release 2.0 Audiocodes M3K/6310 PRI GW Software CD	Version: 5.80A.061	
Audiocodes Element Management System			
Part Number	Part Description	Firmware/Software	
NTVW02AY	AS 5300 Audiocodes EMS Server Package AC	Version: 5.8.96	
NTVW02AZ	AS 5300 Audiocodes EMS Server Package DC		
NTVW02DK	AS 5300 Release 2.0 Audiocodes EMS Application SW on Sun Netra T2000 Server with Oracle 9.2 and Solaris 10 and JAVA ES installed		
Device Name		Software Release	
CPE AS 5300 UC Client (previously MMPC Client)		Version: 7.2.3097_20121120	
AS 5300 1120E and 1140E AS-SIP IP Deskphones		SIP Based Version: 03.01.22.00	
CS2100 11xx AS-SIP IP Deskphones		UNISTIM Based Version: C7F	
Audiocodes MP112 (2 port Integrated Access Device)		Version: 5.80A.054.001	
Audiocodes MP124 (24 port Integrated Access Device)		Version: 5.80A.054.001	
Management Workstation		Customer Provided STIG'd PC	
LEGEND:			
AC	Alternating Current	MAS	Media Application Server
APL	Approved Products List	MFSS	Multifunction Softswitch
Apps	Applications	MMPC	Multimedia Personal Computer
AS	Assured Services	OC3	Optical Carrier-Level 3
CDROM	Compact Disk Read-Only Memory	OS	Operating System
CPE	Customer Premise Equipment	PC	Personal Computer
CS	Communication Server	PRI	Primary Rate Interface
DC	Direct Current	SE	Succession Enterprise
DVD	Digital Video Disk	SIP	Session Initiation Protocol
EMS	Element Management System	STIG	Security Technical Implementation Guide
GW	Gateway	SUT	System Under Test
IP	Internet Protocol	SW	Software
LSC	Local Session Controller	UC	Unified Capabilities
M3K	M3000	UNISTIM	Unified Networks IP Stimulus

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Table 2. SUT Interface Interoperability Status

Interface	Critical	UCR Reference	Threshold CR/FR (See note 1.)	Status	Remarks (See note 2.)
External Interfaces					
10Base-X	Yes	5.3.2.4.2	1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, and 14	Certified	Met threshold CRs/FRs for IEEE 802.3i and 802.3j for the AS-SIP trunk.
100Base-X	Yes	5.3.2.4.2	1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, and 14	Certified	Met threshold CRs/FRs for IEEE 802.3u for the AS-SIP trunk.
1000Base-X	Yes	5.3.2.4.2	1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, and 14	Certified	Met threshold CRs/FRs for IEEE 802.3z and 802.3ab. Applies to AS-SIP trunk interface.
ISDN T1 PRI ANSI T1.619a	Yes	5.3.2.4.3	2, 3, 6, 7, 9, 11, and 14	Certified	Met threshold CRs/FRs. This interface provides legacy DSN and TELEPORT connectivity.
ISDN T1 PRI NI-2	Yes	5.3.2.4.3	2, 3, 6, 7, 9, 11, and 14	Certified	Met threshold CRs/FRs. This interface provides PSTN connectivity.
E1 PRI ITU-T Q.931	No	5.3.2.12.10	2, 3, 6, 7, 9, 11, and 14	Certified	Met threshold CRs/FRs for this interface. This interface provides PSTN connectivity.
SONET OC-3	No	5.3.2.8.4	2, 3, 6, 7, 9, 11, and 14	Certified	Met threshold CRs/FRs for this interface.
NM					
10Base-X	Yes	5.3.2.4.4 5.3.2.7.2.8	15	Certified	Met threshold CRs/FRs for this interface. Verified via LoC.
100Base-X	Yes	5.3.2.4.4 5.3.2.7.2.8	15	Certified	Met threshold CRs/FRs for this interface. 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 3. These high-level CR/FR requirements refer to a detailed list of requirements provided in Reference (c).
2. Detailed information pertaining to open TDRs and associated operational impacts is in Reference (c).

LEGEND:

10Base-X	10 Mbps Ethernet	JITC	Joint Interoperability Test Command
100Base-X	100 Mbps Ethernet	LoC	Letter of Compliance
1000Base-X	1000 Mbps Ethernet	Mbps	Megabits per second
802.3i	10 Mbps twisted pair media for 10Base-X networks	MLPP	Multi-Level Precedence and Preemption
802.3j	10 Mbps fiber media for 10Base-X networks	NI-2	National ISDN Standard 2
802.3u	100BASE-TX, 100BASE-T4, 100BASE-FX Fast Ethernet at 100 Mbps with auto negotiation	NM	Network Management
ANSI	American National Standards Institute	OC-3	Optical Carrier Level 3 (155 Mbps)
APL	Approved Products List	PRI	Primary Rate Interface
AS-SIP	Assured Services Session Initiation Protocol	PSTN	Public Switched Telephone Network
CAS	Channel Associated Signaling	Q.931	Signaling Standard for ISDN
CCS7	Common Channel Signaling Number 7	Q.955.3	ISDN Signaling Standard for E1 MLPP
CR	Capability Requirement	SONET	Synchronous Optical Network
DSN	Defense Switched Network	SS	Softswitch
E1	European Basic Multiplex Rate (2.048 Mbps)	SS7	Signaling System 7
FR	Functional Requirement	SUT	System Under Test
ID	Identification	T1	Digital Transmission Link Level 1 (1.544 Mbps)
IEEE	Institute of Electrical and Electronics Engineers	T1.619a	SS7 and ISDN MLPP Signaling Standard for T1
ISDN	Integrated Services Digital Network	TDR	Test Discrepancy Reports
ITU-T	International Telecommunication Union – Telecommunication Standardization Sector	UC	Unified Capabilities
		UCR	Unified Capabilities Requirements
		WAN	Wide Area Network

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Table 3. 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
	Voice Features and Capabilities	Required	5.3.2.2.2.1	Partially Met (See notes 2 and 3.)
	Public Safety Features	Required	5.3.2.2.2.2	Met
	ASAC Voice	Required	5.3.2.2.2.3.1.2	Met
	ASAC Video	Required	5.3.2.2.2.3.2	Met
	Signaling Protocols	Required	5.3.2.2.2.3	Met
	Signaling Performance	Required	5.3.2.2.2.4	Met
2	Registration, Authentication, and Failover			
	Registration	Required	5.3.2.3.1	Met
	Failover	Required	5.3.2.3.2	Met
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	Global Location Server			
	Global Location Server Requirements	Required	5.3.2.8.2.2	Met
5	LSC Requirements for WAN Softswitch			
	LSC Requirements	Conditional	5.3.2.7	Partially Met (See note 4.)
6	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 5.)
	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 5.)
	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 5.)
	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	Not Met (See note 6.)
	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 Support for AS Voice and Video	Required	5.3.2.10.11	Partially Met (See notes 7 and 8.)
	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 5.)	

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Table 3. SUT CR and FR Status (continued)

CR/FR ID	Capability/Function	Applicability (See note 1.)	UCR Reference	Status
7	MG Requirements			
	Role of MG In SS	Required	5.3.2.12.3.2.1	Met
	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
	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 5.)
	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 (See note 5.)
	MG Interface to TDM Allied and Coalition	Conditional	5.3.2.12.6	Not Tested (See note 5.)
	MG Interface to TDM PSTN in U.S	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 5.)
	MG Support for ISDN PRI Trunks	Required	5.3.2.12.10	Met
	MG Support for CAS Trunks	Conditional	5.3.2.12.11	Not Tested (See note 5.)
	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 V.150. ¹	Required	5.3.2.12.16	Not Met (See note 9.)	
MG Preservation of Call Ringing during Failure	Required	5.3.2.12.17	Not Tested (See note 6.)	
8	SG Requirements			
	SG and CCS7 Network Interactions	Conditional	5.3.2.13.5.1	Not Tested (See note 5.)
	SG Interactions with CCA	Conditional	5.3.2.13.5.2	Not Tested (See note 5.)
	SG Interworking Functions	Conditional	5.3.2.13.5.3	Not Tested (See note 5.)
9	WWNDP Requirements			
	WWNDP	Required	5.3.2.16	Met
	DSN WWNDP	Required	5.3.2.16.1	Met
10	Commercial Cost Avoidance			
	Commercial Cost Avoidance	Required	5.3.2.23	Met (See note 10.)
11	Precedence Call Diversion			
	Precedence call Diversion	Conditional	5.3.2.25	Met
12	AS-SIP Requirements			
	AS-SIP General Requirements	Required	5.3.4	Partially Met (See note 8.)
	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	Partially Met (See note 8.)
	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	

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Table 3. SUT CR and FR Status (continued)

CR/FR ID	Capability/Function	Applicability (See note 1.)	UCR Reference	Status
AS-SIP Requirements (continued)				
12	SIP Requirements for Interworking AS-SIP Signaling Appliance	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	Met
IPv6 Requirements				
13	Product Requirements	Required	5.3.5.4	Partially Met (See note 11.)
Information Assurance				
14	Information Assurance Requirements	Required	5.4	Met (See note 12.)
Network Management				
15	General Management Requirements	Required	5.3.2.17.2	Partially Met (See note 13.)
	VVoIP NMS Interface Requirements	Required	5.3.2.4.4	Partially Met (See note 13.)
	Requirement for FCAPS Management	Required	5.3.2.17.3	Partially Met (See notes 13 and 14.)
	NM requirements of Appliance Functions	Required	5.3.2.18	Partially Met (See note 13.)
	Accounting Management	Required	5.3.2.19	Partially Met (See note 13.)
<p>NOTES:</p> <p>1. The annotation of ‘required’ refers to a high-level requirement category. The applicability of each sub-requirement is provided in Reference (c).</p> <p>2. The SUT had outstanding open TDRs at the completion of testing, which were adjudicated by DISA to have a minor operational impact. The vendor has submitted a POA&M to address the open TDRs. Reference (c) provides additional details. The DTR 18 request resulted in V&V testing conducted from 8 through 23 March 2012. During this test, a discrepancy was noted in which an unattended transfer with a subsequent attended transfer with the REDCOM LSC results in one-way audio. The vendor submitted a POA&M stating they will work with REDCOM to resolve the issue within 180 days. The one-way audio is cleared if the user puts the second “attended” transferred call on hold, then off hold, which results in two-way audio. This was adjudicated by DISA to have a minor operational impact.</p> <p>3. The SUT IP EIs when placed on hold by a subscriber on a CUCM Release 8.0(2) cannot be retrieved, which affects call transfers and 3-way calls. This issue does not exist with the CUCM 8.6. This anomaly occurs when the initial call is placed to or from the CUCM. This discrepancy has been fixed in the SUT Release 3.0. Since this issue is unrelated to Patch Bundle 28, DISA adjudicated this discrepancy as minor with no PoAM for the SUT Release 2.0 with Patch Bundle 28 with the caveat that the SUT Release 2.0 will be retired from the UC APL immediately after the UC APL memorandum including Patch Bundle 28 is posted.</p> <p>4. The LSC is an optional integrated component of the SUT and; therefore, the SUT is certified for joint use with or without the LSC. The SUT was certified with noted minor operational discrepancies. The LSC Special Interoperability Certification letter and test summary report is posted on the UC APL under TN# 0911801. The SUT partially met PEI requirements (no video). The AEI and Operator Console requirements were not tested; this requirement represents a new UCR requirement (Jan 2010) at the time of the APL interoperability testing and therefore compliance is not mandatory at that time, based on allowance of an 18-month development cycle for new requirements.</p> <p>5. This capability or interface is a conditional requirement for a WAN SS. The SUT met all the interfaces requirements for a T1 ISDN PRI (ANSI T1.619a and ANSI T1 607 NI2) and E1 ISDN PRI (ETSI PSTN interface only).</p> <p>6. This requirement represents a new UCR requirement (Jan 2010) at the time of the APL interoperability testing and therefore compliance is not mandatory at that time, based on allowance of an 18-month development cycle for new requirements.</p> <p>7. The SUT PEI hardphone met the UCR requirements for voice only. During the original test, the PEI softphone met both voice and video requirements with one exception: The softphone could assign any DSCP value from 0-63 to media and signaling but could not assign a unique DSCP value for each precedence level per the UCR when running on Windows Vista or Windows 7. This discrepancy was fixed and successfully tested with DTR 8, which included an update on the SUT from Patch Bundle 23 to Patch Bundle 28.</p> <p>8. The vendor did not support AEI video or 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 and furthermore, AEIs are a new UCR 2008, Change 1 requirement and therefore compliance is not mandatory at the time of APL interoperability testing, based on allowance of an 18-month development cycle for new requirements.</p>				

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Table 3. SUT CR and FR Status (continued)

NOTES (continued):			
9. The vendor did not demonstrate V.150.1 support. This requirement represents a new UCR requirement (Jan 2010) at the time of the APL interoperability testing and therefore compliance is not mandatory at that time, based on allowance of an 18-month development cycle for new requirements.			
10. The SUT met this requirement with a Lightweight Directory Access Protocol server which is covered under a separate Interoperability Certification listed separately on the UC APL.			
11. The DISA adjudicated all open TDRs to have a minor operational impact. The fielding of the SUT is limited to IPv4 across the DISN based on the fielding environment, IPv6 partial compliance and POA&M addressing critical IPv6 discrepancies in their next major release in 2012. DISA retains the authority to remove this product from the Department of Defense (DoD) Unified Capabilities (UC) Approved Products List (APL) as follow-on products are fielded with full IPv6 capability. The SUT was tested and met IPv6 interoperability requirements with its optional LSC intra-enclave only with the following discrepancies which were adjudicated by DISA as having a minor operational impact:			
a. POA&M. The SUT does not meet RFC 4007 for IPv6 Scoped Address Architecture.			
b. The SUT does not support IPv6 (Signaling or Media) with the MP112 and MP124 analog IADs.			
c. The SUT SESM Core supports IPv4 only for signaling inter-enclave (WAN).			
d. The SUT Audio Codes MG3K supports IPv4 only for signaling and both IPv4 and IPv6 dual stack for media intra and interenclave.			
12. Information Assurance was tested by a DISA-led Information Assurance test team and published in a separate report, Reference (f).			
13. The vendor submitted a NM LoC with noted discrepancies. The following open TDRs were adjudicated by DISA to have a minor operational impact with a vendor submitted POA&M:			
a. The SUT does not fully support SNMP and MIBs IAW IETF Standards 58 and 62.			
b. The SUT is not fully compliant with NM call detail records formats.			
c. SUT does not support management requirements for ASAC.			
14. The SUT does not support destination code controls. The SUT does not have the capability of setting the percentage of calls to be blocked to the designated destination(s). This was adjudicated by DISA to have a minor operational impact.			
LEGEND:			
AEI	Assured Services End Instrument	LSC	Local Session Controller
APL	Approved Products List	Mbps	Megabits per second
ASAC	Assured Services Admission Control	MG	Media Gateway
AS	Assured Services	MGC	Media Gateway Controller
ASD/NII	Assistant Secretary of Defense for Networks and Information Integration	MIB	Management Information Base
AS-SIP	Assured Services Session Initiation Protocol	NM	Network Management
CAS	Channel Associated Signaling	NMS	Network Management System
CCA	Call Connection Agent	OCONUS	Outside the Continental United States
CCS7	Common Channel Signaling Number 7	PEI	Proprietary End Instrument
CR	Capability Requirement	POA&M	Plan of Action and Milestones
CM	Configuration Management	PRI	Primary Rate Interface
CUCM	Cisco Unified Communications Manager	PSTN	Public Switched Telephone Network
DISA	Defense Information Systems Agency	RFC	Request for Comment
DISN	Defense Information System Network	SESM	Subscriber Edge Services Manager
DoD	Department of Defense	SG	Signaling Gateway
DSCP	Differentiated Services Code Point	SIP	Session Initiation Protocol
DSN	Defense Switched Network	SNMP	Simple Network Management Protocol
E1	European Basic Multiplex Rate (2.048 Mbps)	SNMPv2	Simple Network Management Protocol version 2
EI	End Instrument	SNMPv3	Simple Network Management Protocol version 3
EMS	Element Management System	SS	Softswitch
FR	Functional Requirement	SS7	Signaling System 7
IA	Information Assurance	SUT	System Under Test
IAW	In accordance with	T1	Digital Transmission Link Level 1 (1.544 Mbps)
IETF	Internet Engineering Task Force	TDR	Test Discrepancy Report
IP	Internet Protocol	TDM	Time Division Multiplexing
IPSec	Internet Protocol Security	UC	Unified Capabilities
IPv6	Internet Protocol version 6	UCR	Unified Capabilities Requirements
ISDN	Integrated Services Digital Network	VoIP	Voice over Internet Protocol
IWF	Interworking Function	VVoIP	Voice and Video over Internet Protocol
LDAP	Lightweight Directory Access Protocol	WAN	Wide Area Network
LoC	Letter of Compliance	WWNDP	World Wide Numbering and Dialing Plan

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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 website located at <http://www.disa.mil/Services/Network-Services/UCCO>.

6. The JITC point of contact is Capt Stéphane Arsenault, DSN 879-5269, commercial (520) 538-5269, FAX DSN 879-4347, or e-mail to Stephane.P.Arsenault.fm@mail.mil. JITC's mailing address is P.O. Box 12798, Fort Huachuca, AZ 85670-2798. The UCCO tracking number for the SUT is 0903501.

FOR THE COMMANDER:

Enclosure a/s


for RICHARD A. MEADOR
Chief
Battlespace Communications Portfolio

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ADDITIONAL REFERENCES

- (c) Joint Interoperability Test Command, Memo, JTE, “Special Interoperability Test Certification of the Avaya CS2100 XA-Core SE09.1 –Aura™ AS5300 Version 2.0 Multifunction Softswitch (MFSS) (with specified patch releases),” 29 December 2010
- (d) Office of the Assistant Secretary of Defense, “Department of Defense Unified Capabilities Requirements 2008, Change 1,” 22 January 2010
- (e) Joint Interoperability Test Command, “Unified Capabilities Test Plan (UCTP),” Draft
- (f) Joint Interoperability Test Command, “Information Assurance (IA) Assessment of Avaya Communication Server (CS)2100 Extended Architecture Core (XA-Core) Succession Enterprise (SE)09.1 with (w/)Application Server (AS)5300 (Tracking Number 0903501),” Draft