



DEFENSE INFORMATION SYSTEMS AGENCY
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IN REPLY Joint Interoperability Test Command (JTE)

12 December 2019

MEMORANDUM FOR DISTRIBUTION

Revision 1 (See Enclosure 4)

SUBJECT: Joint Interoperability Certification of the Spok Inc. MediaSTAR™, Software Release 13.4

- References: (a) Department of Defense Instruction 8100.04, “DoD Unified Capabilities (UC),” 9 December 2010
(b) Office of the Department of Defense Chief Information Officer, “Department of Defense Unified Capabilities Requirements 2013 (UCR 2013) Change 2,” September 2017
(c) through (d), see Enclosure 1

1. Certification Authority. Reference (a) establishes the Joint Interoperability Test Command (JITC) as the Joint Interoperability Certification Authority for Department of Defense Information Network (DoDIN) products, Reference (b).

2. Conditions of Certification. The Spok Software Inc. MediaSTAR™ with Software Release 13.4, hereinafter referred to as the System Under Test (SUT), meets the critical requirements of the Unified Capabilities Requirements, Reference (b), as a Customer Premise Equipment and is certified for joint use with no conditions (see Table 1). The SUT was tested with the Avaya Communication Server (CS) 1000M Legacy Private Branch Exchange Release 5.0, Avaya CS2100 Legacy Multifunction Switch Release Succession Enterprise (SE) 09.1, and the Avaya Aura Enterprise Session Controller Release 8.1. JITC analysis determined the SUT is also certified for use with any Legacy CS1000E, CS2100, and Avaya Aura Communication Manger or related switches currently or previously on the DoDIN Approved Products List (APL). The SUT is also certified with specific proprietary digital interfaces utilized by these certified systems noted in Enclosure 2. In addition, the SUT is certified with any Session Controller or Legacy Switching System certified with 2-wire analog interfaces currently or previously on the DoDIN APL. This certification expires upon changes that could affect interoperability, but no later than the specified expiration date in the DoDIN APL memorandum.

Table 1. Conditions

Condition	Status	Operational Impact	Remarks
Not applicable; Spok Software Inc. Spok MediaSTAR™ with Software Release 13.4 meets all of the critical joint interoperability requirements in accordance with the Unified Capabilities Requirements (UCR), Reference (b).			

3. Interoperability Status. Table 2 provides the SUT interface interoperability status, Table 3 provides the Capability Requirements and Functional Requirements status, and Table 4 provides the DoDIN APL product summary, to include all subsequent Desktop Review (DTR) updates.

Table 2. SUT Interface Status

Interface (See note 1.)	Applicability	Status	Remarks																												
Legacy Line Interfaces																															
2-Wire Analog (See notes 2 and 3.)	C	Met																													
Proprietary Digital Line (Avaya CS1000M) (See notes 2 and 4.)	C	Met																													
Proprietary Digital Line (Avaya Aura ESC) (See notes 2 and 5.)	C	Met																													
Proprietary Digital Line (Avaya CS2100) (See notes 2 and 6.)	C	Met																													
IP Network Interfaces																															
IEEE 802.3i/3u/3ab (10/100/1000 Mbps) (See note 7.)	C	Met																													
<p>NOTE(S):</p> <ol style="list-style-type: none"> The UCR does not specify a specific interface that a CPE product must support. The SUT does not interface directly to any of the PBX or Session Controller certified line interfaces. All SUT interface connections are bridged (half-tap) to the certified line interfaces at a designated patch panel. The SUT was tested with the Avaya CS2100 MFS 2-wire analog interface. Based on JITC analysis the SUT is also certified with any Session Controller or Legacy Switching System certified with 2-wire analog interfaces currently or previously on the DoDIN APL. The SUT was tested with the Avaya CS1000M PBX 2420 and 3905 digital interfaces. Based on JITC analysis the 3904 is also certified by similarity to the 3905. The digital Aastra 6320 was not tested but was determined to be compliant based upon previous test data collected on the same hardware platform with similar performing software and product maturity. The SUT was tested with the Avaya Aura 8.1 ESC 5316 digital interface. Other digital interfaces on the Avaya Aura ESC were not tested but were determined to be compliant based upon previous test data collected on the same hardware platform with similar performing software and product maturity. The SUT was not tested with the Avaya CS2100 5316 digital interface but was determined to be compliant based upon the previous test data collected on the same hardware platform with similar performing software and product maturity. The Avaya CS2100 MFS offers other digital interfaces, which were also not tested, and based on the same analysis above are also certified for joint use. The SUT provided an IP intra-enclave interface between the MediaSTAR Engine and MediaSTAR Inspector. <p>LEGEND:</p> <table> <tr> <td>APL</td> <td>Approved Products List</td> <td>JITC</td> <td>Joint Interoperability Test Command</td> </tr> <tr> <td>C</td> <td>Conditional</td> <td>MFS</td> <td>Multifunction Switch</td> </tr> <tr> <td>CPE</td> <td>Customer Premise Equipment</td> <td>PBX</td> <td>Private Branch Exchange</td> </tr> <tr> <td>CS</td> <td>Communication Server</td> <td>R</td> <td>Required</td> </tr> <tr> <td>DoDIN</td> <td>Department of Defense Information Network</td> <td>SUT</td> <td>System Under Test</td> </tr> <tr> <td>ESC</td> <td>Enterprise Session Controller</td> <td>UCR</td> <td>Unified Capabilities Requirements</td> </tr> <tr> <td>IP</td> <td>Internet Protocol</td> <td></td> <td></td> </tr> </table>				APL	Approved Products List	JITC	Joint Interoperability Test Command	C	Conditional	MFS	Multifunction Switch	CPE	Customer Premise Equipment	PBX	Private Branch Exchange	CS	Communication Server	R	Required	DoDIN	Department of Defense Information Network	SUT	System Under Test	ESC	Enterprise Session Controller	UCR	Unified Capabilities Requirements	IP	Internet Protocol		
APL	Approved Products List	JITC	Joint Interoperability Test Command																												
C	Conditional	MFS	Multifunction Switch																												
CPE	Customer Premise Equipment	PBX	Private Branch Exchange																												
CS	Communication Server	R	Required																												
DoDIN	Department of Defense Information Network	SUT	System Under Test																												
ESC	Enterprise Session Controller	UCR	Unified Capabilities Requirements																												
IP	Internet Protocol																														

Table 3. SUT Capability Requirements and Functional Requirements Status

CR/FR ID	UCR Requirement (See note 1.)	UCR 2013 Reference	Status
1	Customer Premise Equipment Requirements (R)	3.7.2	Met
2	Differentiated Services Code Point Tagging Requirements (R)	7.2.3 Table 7.2-3	Met (See notes 2 and 3.)
3	Internet Protocol version 6 Requirements (R)	5.2	Met
<p>NOTE(S):</p> <ol style="list-style-type: none"> The annotation of 'required' refers to a high-level requirement category. The applicability of each sub-requirement is provided in Reference (c). The IP connectivity of the SUT only exists between the MediaSTAR Engine and the MediaSTAR Inspector. Differentiated Services Code Point testing was not conducted, however it was determined to be compliant based upon the vendor's LoC and previous test data collected on the same hardware platform with similar performing software and product maturity. 			

Table 3. SUT Capability Requirements and Functional Requirements Status (continued)

LEGEND:			
CR	Capability Requirement	LoC	Letters of Compliance
FR	Functional Requirement	R	Required
ID	Identification	SUT	System Under Test
IP	Internet Protocol	UCR	Unified Capabilities Requirements
JITC	Joint Interoperability Test Command		

Table 4. DoDIN APL Product Summary

Product Identification			
Product Name	Spok MediaSTAR™		
Software Release	13.4		
UCR Product Type	Customer Premise Equipment (CPE)		
Product Description	CPE is a passive call logging and recording solution. The CPE devices may include answering machines, voice mail systems, automated call distributors, proprietary telephone sets, standards-based telephone sets, facsimile machines, voice-band modems, ISDN Termination 1 devices and Terminal Adapters, and certain devices deemed mandatory for local or host nation telecommunications network compliance (i.e., 911 emergency service). The SUT is used to record telephone conversations on legacy switching system interfaces. The MediaSTAR engine monitors telephone line activity, writes all telephone line events to the database, records conversations to disk files in “.wav” format, which can be played back later with any standard audio player, and provides all this information to the MediaSTAR Inspectors in real time via TCP/IP.		
Product Components (See note.)	Component Name	Version	Remarks
MediaSTAR Engine	Dell Power Edge R720	Windows Server 2019 MediaSTARengine version 13.4.0.97	
MediaSTAR Inspector	Dell Optiplex XE	Windows Server 2019 with MediaSTARinspector version 13.4.0.56	
NOTE(S): The detailed component and subcomponent list is provided in Reference (c) of Enclosure 1.			
LEGEND:			
APL	Approved Products List	ISDN	Integrated Services Digital Network
CPE	Customer Premise Equipment	TCP	Transmission Control Protocol
DoDIN	Department of Defense Information Network	UCR	Unified Capabilities Requirements
IP	Internet Protocol		

4. Test Details. This certification is based on interoperability testing, review of the vendor’s Letters of Compliance (LoC), and the Defense Information Systems Agency (DISA) Certifying Authority Recommendation for inclusion on the DoDIN APL. JITC conducted testing at the Global Network Test Facility at Fort Huachuca, Arizona from 12 November through 15 November 2019, using test procedures derived from Reference (c). Review of the vendor’s LoC completed on 12 November 2019. A JITC-led Cybersecurity (CS) test team conducted CS testing and published the results in a separate report, Reference (d). Enclosure 2 documents the test results and describes the tested network and system configurations. Enclosure 3 provides a detailed list of the interface, capability, and functional requirements. Enclosure 4 provides a list of errata changes to this certification since the original signature date.

5. Additional Information. JITC distributes interoperability information via the JITC Electronic Report Distribution system, which uses Sensitive but Unclassified Internet Protocol 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 Industry Toolkit (JIT) at <https://jit.fhu.disa.mil/>. Due to the sensitivity

of the information, the CS Assessment Package that contains the approved configuration and deployment guide must be requested directly from the Approved Products Certification Office (APCO), e-mail: disa.meade.ie.list.approved-products-certification-office@mail.mil. All associated information is available on the DISA APCO website located at <https://aplits.disa.mil>

6. Point of Contact (POC). JITC POC: Ms. Lorraine Gardner, commercial telephone (520) 538-5221, DSN telephone 879-5221, FAX DSN 879-4347; e-mail address: lorraine.gardner.civ@mail.mil; mailing address: Joint Interoperability Test Command, ATTN: JTE2 (Ms. Lorraine Gardner), P.O. Box 12798, Fort Huachuca, AZ 85670-2798. The APCO tracking number for the SUT is 1915601.

FOR THE COMMANDER:

4 Enclosures a/s

for RIC HARRISON
Chief
Networks/Communications &
DoDIN Capabilities Division

Distribution (electronic mail):

DoD CIO
Joint Staff J-6, JCS
USD (AT&L)
ISG Secretariat, DISA, JT
U.S. Strategic Command, J665
US Navy, OPNAV N2/N6FP12
US Army, DA-OSA, CIO/G-6 ASA (ALT), SAIS-IOQ
US Air Force, SAF/CIO A6XA
US Marine Corps, MARCORSSYSCOM, SIAT, A&CE Division
US Coast Guard, CG-64
DISA/ISG REP
DIA, Office of the Acquisition Executive
NSG Interoperability Assessment Team
DOT&E, Netcentric Systems and Naval Warfare
Medical Health Systems, JMIS PEO T&IVV
HQUSAISEC, ELIE-ISE-ME
APCO

ADDITIONAL REFERENCES

- (c) Joint Interoperability Test Command (JITC), "Customer Premise Equipment (CPE) Generic Test Procedures Version 1.0 Unified Capabilities Requirements (UCR) 2013 Change 2," February 2019
- (d) JITC, "Cybersecurity Assessment Report for Spok Inc., MediaSTAR™, Release 13.4 CPE, Tracking Number 1915601," December 2019

CERTIFICATION SUMMARY

1. SYSTEM AND REQUIREMENTS IDENTIFICATION. The Spok Inc. MediaSTAR™ with Software Release 13.4 is hereinafter referred to as the System Under Test (SUT). Table 2-1 depicts the SUT identifying information and requirements source.

Table 2-1. System and Requirements Identification

System Identification	
Sponsor	United States Army
Sponsor Point of Contact	Jordan Silk, Address: Mission Engineering Directorate, Ft. Huachuca, Arizona, E-mail: jordan.r.silk.civ@mail.mil
Vendor Point of Contact	Azad Sadick, Address: 10400 Yellow Circle Drive, Suite 100, Eden Prairie, Minnesota 55343, E-mail: azad.sadick@spok.com
System Name	Spok MediaSTAR™
Increment and/or Version	13.4
Product Category	Customer Premise Equipment Generic
System Background	
Previous certifications	Spok MediaStar Rel. 13.4 TN 1233802 DTR 3
Tracking	
APCO ID	Tracking Number 1915601
System Tracking Program ID	4743
Requirements Source	
Unified Capabilities Requirements	Unified Capabilities Requirements 2013, Change 2, Sections 3.7.2, 7.2.3, and 5.2
Remarks	None
Test Organization	Joint Interoperability Test Command, Fort Huachuca, Arizona 85670
LEGEND:	
APCO	Approved Products Certification Office
DTR	Desktop Review
ID	Identification

2. SYSTEM DESCRIPTION. A wide variety of Customer Premise Equipment (CPE) manufactured and sold by many sources was connected to the line (subscriber) side of a Defense Switched Network (DSN) switching system. Such varieties include industry “American National Standards Institute – European Telecommunications Standards Institute (ANSI-ETSI) Standards”- based digital and analog devices, and non-standards based proprietary digital devices. During the transition period between Time Division Multiplexing- and Internet Protocol (IP)-based technologies, some locations may have a requirement to interface the legacy CPE to a Session Controller (SC). As a result, most SC vendors provide an optional Integrated Access Device to permit the use of CPE until it is replaced. The CPE devices may include answering machines, voice mail systems, automated call distributors, proprietary telephone sets, standards-based telephone sets, facsimile machines, voice-band modems, Integrated Services Digital Network Termination 1 devices and Terminal Adapters, and certain devices that are deemed mandatory for local or host nation telecommunications network compliance (i.e., 911 emergency service).

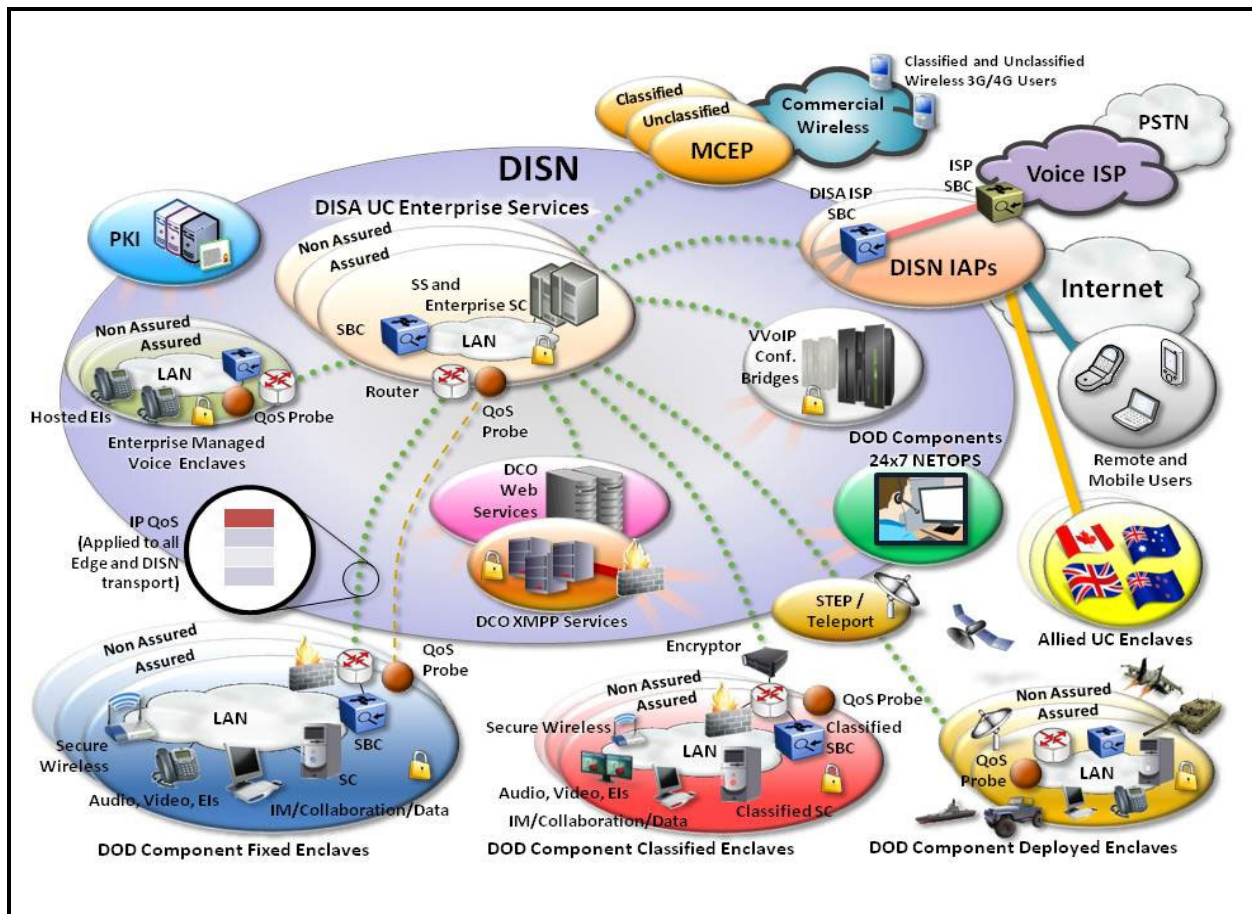
The SUT is used to record telephone conversations on legacy switching system interfaces. The MediaSTAR engine monitors telephone line activity, writes all telephone line events to the database, records conversations to disk files in “.wav” format, which can be played back later

with any standard audio player, and provides all this information to the MediaSTAR Inspector component in real time via Transmission Control Protocol/IP.

3. OPERATIONAL ARCHITECTURE. The Department of Defense (DoD) Information Network (DoDIN) architecture is a two-level network hierarchy consisting of Defense Information Systems Network backbone switches and Service/Agency installation switches. The DoD Chief Information Officer and Joint Staff policy and subscriber mission requirements determine which type of switch can be used at a particular location. The DoDIN architecture, therefore, consists of several categories of switches. Figure 2-1 depicts the notional operational DoDIN architecture in which the SUT may be used.

4. TEST CONFIGURATION. The Joint Interoperability Test Command (JITC)] test team conducted testing on the SUT at their Global Network Test Facility in a manner and configuration similar to that of the notional operational environment depicted in Figure 2-1. The test team verified the required functions and features of the SUT using the end-to-end test configuration depicted in Figure 2-2. The test team conducted interoperability testing of the SUT components by testing the SUT with different vendor DoDIN Approved Products List certified products. Cybersecurity (CS) testing used the same configuration.

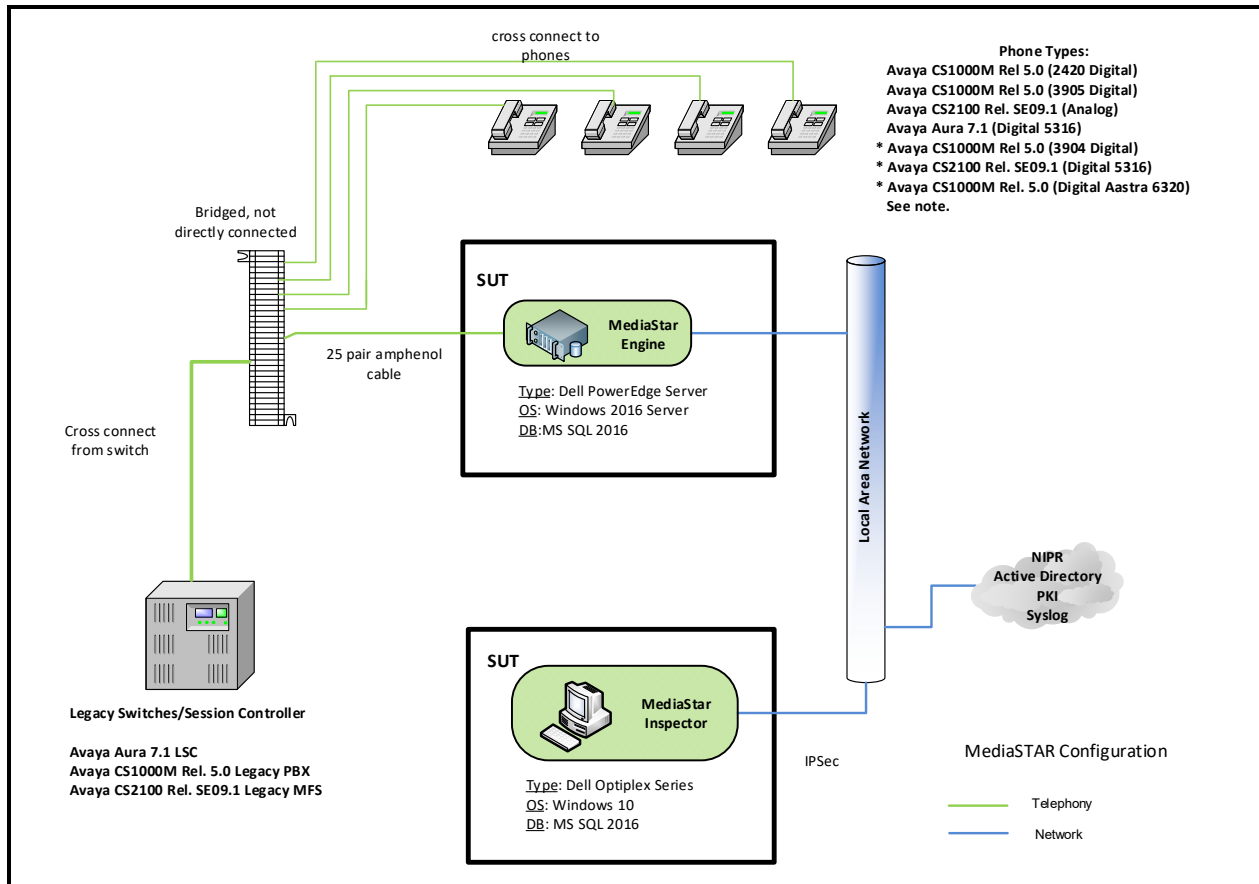
5. METHODOLOGY. Testing was conducted using CPE Generic requirements derived from the Unified Capabilities Requirements (UCR) 2013 Change 2, Reference (b), and the CPE test procedures derived from Reference (c).



LEGEND:

Conf.	Conference	MCEP	Multi Carrier Entry Point
DCO	Defense Connection Online	NETOPS	Network Operations
DISA	Defense Information Systems Agency	PKI	Public Key Infrastructure
DISN	Defense Information Systems Network	PSTN	Public Switched Telephone Network
DoD	Department of Defense	QoS	Quality of Service
DoDIN	Department of Defense Information Network	SBC	Session Border Controller
EI	End Instrument	SC	Session Controller
G	Generation	SS	Softswitch
IAP	Internet Access Point	STEP	Standardized Tactical Entry Point
IM	Instant Messaging	UC	Unified Capabilities
IP	Internet Protocol	VVoIP	Voice and Video over IP
ISP	Internet Service Provider	XMPP	Extensible Messaging and Presence Protocol
LAN	Local Area Network		

Figure 2-1. Notional DoDIN Network Architecture



NOTE(S): End Instruments preceded by an asterisk (*) were not tested but were determined to be compliant based upon the vendor's LoC and previous test data collected on the same hardware platform with similar performing software and product maturity.

LEGEND:

CS	Communication Server	OS	Operating System
DB	Database	PBX	Private Branch Exchange
IPSec	Internet Protocol Security	PKI	Public Key Infrastructure
LoC	Letters of Compliance	Rel.	Release
LSC	Local Session Controller	SE	Succession Enterprise
MFS	Multifunction Switch	SQL	Standardized Query Language
MS	Microsoft	SUT	System Under Test
NIPR	Non-Secure Internet Protocol Router		

Figure 2-2. SUT Test Configuration

6. INTEROPERABILITY REQUIREMENTS, RESULTS, AND ANALYSIS. The interface, Capability Requirements, Functional Requirements, CS, and other requirements for the DoDIN CPE Generic are established by UCR 2013 Change 2, Sections 3.7.2, 7.2, and 5.2.

a. CPE Generic Requirements. The UCR 2013, Section 3.7.2, states that all CPE devices are required to meet the following requirements:

1) If a CPE device supports Multi-Level Precedence and Preemption, then that device shall do so in accordance with the requirements listed in Section 2.25.1, Multilevel Precedence and Preemption, and shall not affect the DSN interface features and functions associated with line supervision and control. The SUT does not support this conditional requirement.

2) All DSN CPE, at a minimum, must meet the requirements of Part 15 and Part 68 of the Federal Communications Commission (FCC) Rules and Regulations, and the Administrative Council for Terminal Attachments. The SUT met this requirement with the vendor's Letters of Compliance (LoC).

3) If a CPE device supports autoanswer, then that device shall have an "autoanswer" mode feature allowing the autoanswer mode to be set to a "time" more than the equivalency of four ROUTINE precedence ring intervals, in accordance with Section 2.25.1, Multilevel Precedence and Preemption, before "answer" supervision is provided. The SUT does not support this conditional requirement.

4) If a CPE device is required to support precedence calls above ROUTINE precedence, then that device shall respond properly to an incoming alerting (ringing) precedence call cadence, as described in Section 2.9.1.2.1, UC Ringing Tones, Cadences, and Information Signals. The SUT does not support this conditional requirement.

5) If a CPE device can "out dial" Dual Tone Multi-Frequency (DTMF) and/or dial pulse digits (automatic and/or manual), then that device shall comply with the requirements as specified in Telcordia Technologies GR-506-CORE, Local Access and Transport Area (LATA) Switching Systems Generic Requirements(LSSGR): Signaling for Analog Interfaces, Issue 1, June 1996, paragraph 10. That device shall also be capable of outpulsing and interpretation of DTMF digits on outgoing and two-way trunks as specified in Telcordia Technologies GR-506-CORE, LSSGR: Signaling for Analog Interfaces, Issue 1, June 1996, paragraph 15, and Table 3.7-1. The SUT does not support this conditional requirement. The SUT connects to the various switches and session controllers with a bridged connection and is not directly connected.

6) If a CPE device contains a modem or facsimile machine, then that modem or facsimile machine shall be compatible with International Telecommunication Union (ITU) and Telcordia standards, as applicable. The SUT does not support this conditional requirement.

7) If a CPE device contains a facsimile device, then that facsimile device, at a minimum, shall meet the requirements in accordance with applicable DoD Information Technology Standards Registry standards. The SUT does not support this conditional requirement.

8) If Configuration Management and/or Fault Management is provided by the CPE device so that it can be managed by the Advanced DSN Integrated Management Support System or other management systems, then the management information for that CPE device shall be provided by one or more of the following serial or Ethernet interfaces:

- Serial interfaces shall be in accordance with one of the following standards:
 - ITU - Telecommunication Standardization Sector (ITU-T) Recommendation V.35. The SUT does not support this conditional management interface.
 - Telecommunications Industry Association (TIA-232-F). The SUT does not support this conditional management interface.
 - Electronic Industries Alliance (EIA)-449-1. The SUT does not support this conditional management interface.
 - TIA-530-A. The SUT does not meet this conditional requirement. The SUT does not support this conditional management interface.
- Ethernet interfaces shall be in accordance with Institute of Electrical and Electronics Engineers 802.3-2002. The SUT supports this conditional interface for management with the vendor's LoC.

9) If a CPE device supports 911 and E911 emergency services, then, at a minimum, the 911 and the E911 (tandem) emergency services shall have the capability to "hold" (prevent) the originating subscriber or caller from releasing the call, via the "switch supervision interaction for line and trunk control by the called party" feature, in accordance with Telcordia Technologies GR-529-CORE. Additionally, the FCC regulations regarding 911 and E911 must be considered. The SUT does not support this conditional requirement.

b. The UCR 2013, Change 2, Section 7.2.3, states the product shall support the Differentiated Services Code Point (DSCP) plan, as shown in Table 7.2-3, DSCP Assignments. Differentiated Services assignments shall be software configurable for the full range of six bit values (0-63 Base10) for backwards compatibility with IP precedence environments that may be configured to use the Type of Service (TOS) field in the IP header but do not support DSCP. This requirement was not tested; however, JITC determined the SUT to be compliant based upon the vendor's LoC and previous test data collected on the same hardware platform with similar performing software and product maturity.

c. The UCR 2013, Change 2, Section 5.2, states that if a CPE supports IP interfaces, then the CPE shall support the Internet Protocol version 6 (IPv6) requirements as defined for Network Appliance/Simple Server in UCR Section 5, IPv6. The SUT met this requirement with the vendor's LoC.

d. Hardware/Software/Firmware Version Identification. Table 3-3 provides the SUT components' hardware, software, and firmware tested. The JITC tested the SUT in an operationally realistic environment to determine its interoperability capability with associated network devices and network traffic. Table 3-4 provides the hardware, software, and firmware of the components used in the test infrastructure.

7. TESTING LIMITATIONS. None.

8. CONCLUSION(S). The SUT meets the critical interoperability requirements for a Generic CPE in accordance with the UCR 2013, Change 2, and is certified for use with the interfaces as depicted in Table 3-1.

DATA TABLES

Table 3-1. SUT Interface Status

Interface (See note 1.)	Applicability	Status	Remarks														
Legacy Line Interfaces																	
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APL Approved Products List	JITC Joint Interoperability Test Command																
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CPE Customer Premise Equipment	PBX Private Branch Exchange																
CS Communication Server	R Required																
DoDIN Department of Defense Information Network	SUT System Under Test																
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IP Internet Protocol																	

Table 3-2. SUT Capability and Functional Requirements and Status

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2	Differentiated Services Code Point Tagging Requirements (R)	7.2.3 Table 7.2-3	Met (See notes 2 and 3.)
3	Internet Protocol version 6 Requirements (R)	5.2	Met
<p>NOTE(S):</p> <ol style="list-style-type: none"> 1. The annotation of 'required' refers to a high-level requirement category. The applicability of each sub-requirement is provided in Reference (c). 2. The IP connectivity of the SUT exists only between the MediaSTAR Engine and the MediaSTAR Inspector. 3. The SUT did not undergo Differentiated Services Code Point testing, however, JITC analysis determined the SUT to be compliant based upon previous test data collected on the same hardware platform with similar performing software and product maturity. 			

Table 3-2. SUT Capability and Functional Requirements and Status

LEGEND:			
C	Conditional	JITC	Joint Interoperability Test Command
CR	Capability Requirement	R	Required
FR	Functional Requirement	SUT	System Under Test
ID	Identification	UCR	Unified Capabilities Requirements
IP	Internet Protocol		

Table 3-3. SUT Hardware/Software/Firmware Version Identification

Component	Release	Sub-component	Function
Spok Inc. MediaSTAR Rel. 13.4	Windows Server 2019	MediaSTAR Engine	Call Recording System
	MS SQL 2017		
	McAfee VirusScan Enterprise v8.8		
	Axway Desktop Validator v5.0.29975		
	ActivID ActivClient x64 (7.1.0.177)		
	MediaSTARengine v13.4.0.97		
	AlwaysUP v11.8.3.74		
	AudioCodes Smartworks v5.09.01		
	Windows 10	MediaSTAR Inspector	Real-time Monitoring System
	McAfee VirusScan Enterprise v8.8		
	Axway Desktop Validator v5.0.29975		
	ActivID ActivClient x64 (7.1.0.177)		
	MediaSTARinspector v13.4.0.56		

LEGEND:			
JITC	Joint Interoperability Test Command	SQL	Standardized Query Language
MS	Microsoft	SUT	System Under Test
Rel.	Release	v	Version

Table 3-4. SUT Test Infrastructure Hardware/Software/Firmware Version Identification

System Name	Software Release	Function
Required Ancillary Equipment (Site-Provided)		
Active Directory		
Public Key Infrastructure		
SysLog Server		
Test Network Components		
Avaya Aura	8.1	ESC/LSC
Cisco Unified Communications Manager	12.5	ESC/LSC
Avaya CS1000M	5.0	MFS
Avaya CS2100	SE9.1	MFS

LEGEND:			
CS	Communication Server	MFS	Multifunction Switch
ESC	Enterprise Session Controller	SE	Succession Enterprise
LSC	Local Session Controller	SUT	System Under Test

Table 4-1. Joint Interoperability Certification Revision History

Revision	Date	Approved By	Comments																
N/A	12 December 2019	Bradley Clark	Original Joint Interoperability Certification.																
1	28 May 2020	Lorraine Gardner	<p>Amended the original certification memorandum as follows:</p> <ul style="list-style-type: none"> • In the Memo: <ul style="list-style-type: none"> - Paragraph 2, Conditions of Certification, second sentence: For correctness, changed the Avaya Aura Enterprise Session Controller Release from 7.1 to 8.1. - Table 2, SUT Interface Status, Legend, Note 5, first sentence: For correctness, changed the Avaya Aura Release from 7.1 to 8.1. - Table 4, DoDIN APL Product Summary, Product Component MediaSTAR Inspector, Version column: For correctness, changed the MediaSTARinspector version from v13.4.0.53 to v13.4.0.56. • In Enclosure 3: <ul style="list-style-type: none"> - Table 3-1, SUT Interface Status, Legend, Note 5, first sentence: For correctness, changed the Avaya Aura Release from 7.1 to 8.1. - Table 3-3, SUT Hardware/Software/Firmware Version Identification, Product Component Spok Inc. MediaSTAR Rel. 13.4, Release column: For correctness, changed the MediaSTARinspector Release from v13.4.0.53 to v13.4.0.56. - Table 3-4, SUT Test Infrastructure Hardware/Software/Firmware Version Identification, Test Network Components, first entry, Avaya Aura: For correctness, changed the Software Release from 7.1 to 8.1. 																
<p>LEGEND:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">APL</td> <td style="width: 40%;">Approved Products List</td> <td style="width: 15%;">Rel.</td> <td style="width: 30%;">Release</td> </tr> <tr> <td>DoDIN</td> <td>Department of Defense Information Network</td> <td>SUT</td> <td>System Under Test</td> </tr> <tr> <td>Inc.</td> <td>Incorporated</td> <td>v</td> <td>version</td> </tr> <tr> <td>N/A</td> <td>Not Applicable</td> <td></td> <td></td> </tr> </table>				APL	Approved Products List	Rel.	Release	DoDIN	Department of Defense Information Network	SUT	System Under Test	Inc.	Incorporated	v	version	N/A	Not Applicable		
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