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IN REPLY REFER TO: Joint Interoperability Test Command (JTE) 26 November 2024

MEMORANDUM FOR DISTRIBUTION

SUBJECT: Extension of the Joint Interoperability Certification of the Cisco Enterprise Session Controller (ESC) 21 (ESC21) with Software Release 15

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 (j), see Enclosure

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 Cisco Enterprise Session Controller (ESC) 21 (ESC21) with Software Release 15, hereinafter referred to as the System Under Test (SUT), meets the critical requirements of the Unified Capabilities Requirements, Reference (b), as an ESC in Type 1, 2, and 3 environments and as a Local Session Controller (LSC) and is certified for joint use with no conditions, as noted in Table 1. This certification expires upon changes that affect interoperability, but no later than the expiration date specified in the DoDIN Approved Products List (APL) memorandum.

This extension of the certification is for Desktop Reviews (DTRs) 62, 63, 64, and 65.

DTR 62 was requested to update the Interworking Gateway (IWG)/Session Border Controller (SBC) IOS XE software version from 17.12 to 17.15 on the Aggregated Services Router (ASR) 1006-X, Catalyst C8300 series, C8200 series, and C8000v series of router platforms.

DTR 63 was requested to update the Media Gateway (MG) IOS XE software version from 17.12 to 17.15 on the C8200 and C8300 series router platforms.

DTR 64 was requested to update the Analog/Voice Gateway IOS XE software version from 17.12 to 17.15 on the C8200 and C8300 series router platforms and, VG400, VG410 series, VG420, and VG450 series analog voice gateways.

JITC Memo, JTE, Extension of the Joint Interoperability Certification of the Cisco Enterprise Session Controller (ESC) 21 (ESC21) with Software Release 15

DTR 65 was requested to update the Media Termination Point (MTP) functionality with IOS XE software version update from 17.12 to 17.15 on the C8200 series and C8300 series of router platforms.

See Paragraph 4 for the test details.

Table 1. Conditions

Description		Operational Impact	Remarks
UCR Waivers			
None.			
Description		**Operational Impact**	**Remarks**
TDR#	**Conditions of Fielding**		
CIS-0787-005	When an IP EI initiates and establishes a precedence call using a "9P" prefix to an external end instrument on another session controller via an ISDN T1 PRI (ANSI T1.619a), the IP EI is preemptable by callers using the same precedence level or a lesser precedence level. Note, this issue only occurs when the call trunk is over an ISDN T1 PRI and the call is initiated from an IP EI on the SUT. As a result, the following CoF applies: To ensure the SUT IP EI is not preemptable by a caller with a lower precedence level, the IP EI must initiate call with the soft keys on the SUT IP EI in lieu of dialing 9 plus precedence (93, 92, etc.) or configure the IP EI for two or more call appearances.	CLOSED	See note 1.
TDR#	**Open Test Discrepancies**		
CIS-0787-001	The SUT does not support Preset Conferencing.	CLOSED	See note 2.
CIS-0787-007	The SUT IP EIs do not receive a Block Precedence Announcement (BPA) when calling over a T1 ISDN PRI GW Trunk to a phone that is currently in a call that is of equal or higher precedence above ROUTINE.	CLOSED	See note 3.

NOTE(S):
1. CIS-0787-005: JITC DTR 12 IO testing confirmed resolution of the call preemption discrepancy and closed TDR CIS-0787-005.
2. CIS-0787-001: This TDR was closed based on resolution of the Preset Conferencing test discrepancy during testing conducted by NIWC in the Assured Real-Time Communications Lab at Norfolk, Virginia, on 12 July 2022, in accordance with Blast Dialing functionality/Preset Conferencing capabilities (UCR requirement SCM-004680). Blast Dialing functionality/Preset Conferencing capabilities for the Cisco ESC21 is provided by the VQ Communications Conference Manager certified via TN 2102202, Reference (c).
3. CIS-0787-007: JITC DTR 19 IO testing confirmed resolution of the block precedence discrepancy and closed TDR CIS-0787-007.

LEGEND:

ANSI	American National Standards Institute	ISDN	Integrated Services Digital Network
BPA	Block Precedence Announcement	JITC	Joint Interoperability Test Command
CIS	Cisco	PRI	Primary Rate Interface
CoF	Condition of Fielding	SUT	System Under Test
DTR	Desktop Review	T1	Digital Transmission Link Level 1 (1.544 Mbps)
EI	End Instrument	T1.619a	SS7 and ISDN MLPP Signaling Standard for T1
GW	Gateway	TN	Tracking Number
IO	Interoperability	TDR	Test Discrepancy Report
IP	Internet Protocol	UCR	Unified Capabilities Requirements

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 DTR updates.

Table 2. SUT Interface Status

Interface (See note 1.)	Applicability	Status	Remarks
IP Trunk Interfaces			
100 Mbps	C	Met	The SUT met the critical CRs and FRs for the IEEE 802.3u management interface.
1000 Mbps	C	Met	The SUT met the critical CRs and FRs for the IEEE 802.3z or 802.3ab management interface
10 Gbps	C	Not Tested	The SUT offers a 10 Gbps trunk side interface only; however, it was not tested and is not certified with the conditional IEEE 802.3ae interface due to test architecture limitations.
IP Line Interfaces			
100 Mbps	C	Met	The SUT met the critical CRs and FRs for the IEEE 802.3u interface with the SUT PEIs, AEIs, and trunk signaling and media interfaces
1000 Mbps	C	Met	The SUT met the critical CRs and FRs for the IEEE 802.3z or 802.ab interface with the SUT PEIs, AEIs, and trunk signaling and media interfaces.
10 Gbps	C	Not Tested	The SUT offers a 10 Gbps trunk side interface only; however, it was not tested and is not certified with the conditional IEEE 802.3ae interface due to test architecture limitations.
Legacy Trunk Interfaces			
ISDN T1 PRI NI-2 (ANSI T1.619a)	R	Partially Met (See note 2.)	The SUT partially met the critical CRs/FRs. This interface provides legacy DSN and TELEPORT connectivity.
ISDN T1 PRI NI-2	R	Met	The SUT met the critical CRs/FRs. This interface provides PSTN connectivity.
T1 CAS	O	Not Tested	The SUT supports this interface, but it was not tested and not included in this certification.
E1 PRI (ITU-T Q.955.3)	C	Partially Met (See note 2.)	The SUT partially met the critical CRs/FRs. This interface provides OCONUS MLPP connectivity in ETSI-compliant countries.
E1 PRI (ITU-T Q.931)	C	Met	The SUT met the critical CRs/FRs. This interface provides PSTN connectivity in OCONUS ETSI-compliant countries.
E1 CAS	O	Not Tested	The SUT supports this interface, but it was not tested and not included in this certification.
Legacy Line Interfaces			
2-wire analog	R	Met	The SUT met the critical CRs and FRs for the 2-wire analog interface with 2-wire secure and non-secure analog instruments.
ISDN BRI	O	Not Tested	The SUT does not support this optional interface.
Network Management Interfaces			
10 Mbps	C	Met	The SUT met the critical CRs and FRs for the IEEE 802.3i or 802.j management interface.
100 Mbps	C	Met	The SUT met the critical CRs and FRs for the IEEE 802.3u management interface.
1000 Mbps	C	Met	The SUT met the critical CRs and FRs for the IEEE 802.z or 802.ab management interface.
10 Gbps	C	Not Tested	The SUT offers a 10 Gbps trunk side interface only; however, it was not tested and is not certified with the conditional IEEE 802.3ae interface due to test architecture limitations.

NOTE(S):
1. Table 3 depicts the SUT high-level requirements. Enclosure 3 of References (d) provides a detailed list of requirements.
2. This interface was not tested but was determined to be compliant based on the Vendor's LoC and previous test data collected on the same hardware platform with similar performing software, and product maturity.

(Table continues next page.)

Table 2. SUT Interface Status (continued)

LEGEND:

AEI	AS-SIP EI	LoC	Letters of Compliance
ANSI	American National Standards Institute	Mbps	Megabits per second
AS-SIP	Assured Services Session Initiation Protocol	MLPP	Multi-Level Precedence and Preemption
BRI	Basic Rate Interface	NI-2	National ISDN Standard 2
C	Conditional	O	Optional
CAS	Channel Associated Signaling	OCONUS	Outside the Continental United States
CR	Capability Requirement	PEI	Proprietary End Instrument
DSN	Defense Switched Network	PRI	Primary Rate Interface
E1	European Basic Multiplex Rate (2.048 Mbps)	PSTN	Public Switched Telephone Network
EI	End Instrument	Q.931	Signaling Standard for ISDN
ETSI	European Telecommunications Standards Institute	Q.955.3	ISDN Signaling Standard for E1 MLPP
FR	Functional Requirement	R	Required
Gbps	Gigabits per second	SS7	Signaling System 7
IEEE	Institute of Electrical and Electronics Engineers	SUT	System Under Test
IP	Internet Protocol	T1	Digital Transmission Link Level 1 (1.544 Mbps)
ISDN	Integrated Services Digital Network	T1.619a	SS7 and ISDN MLPP Signaling Standard for T1
ITU-T	International Telecommunication Union - Telecommunication Standardization Sector		

Table 3. SUT Capability Requirements and Functional Requirements Status

CR/FR ID	UCR Requirement (See note 1.)	UCR 2013 Reference	Status
1	Voice Features and Capabilities (R)	2.2	Met
2	Assured Services Admission Control (R)	2.3	Met
3	Signaling Protocols (R)	2.4	Met
4	Registration and Authentication (R)	2.5	Met (See note 2.)
5	SC and SS Failover and Recovery (R)	2.6	Met
6	Product Interface (R)	2.7	Met
7	Product Physical, Quality, and Environmental Factors (R)	2.8	Met
8	End Instruments (including tones and announcements) (R)	2.9	Met
9	Session Controller (R)	2.10	Met
10	AS-SIP Gateways (C)	2.11	Not Tested (See note 3.)
11	Enterprise UC Services (R)	2.12	Met (See note 4.)
12	Call Connection Agent (R)	2.14	Met
13	CCA Interaction with Network Appliances and Functions (R)	2.15	Met
14	Media Gateway (R)	2.16	Met
15	Worldwide Numbering & Dialing Plan (R)	2.18	Met
16	Management of Network Devices (R)	2.19	Met
17	V.150.1 Modem Relay Secure Phone Support (R)	2.20	Met
18	Requirements for Supporting AS-SIP Based Ethernet Devices for Voicemail Systems (C)	2.21	Not Tested (See note 5.)
19	Local Attendant Console Features (O)	2.22	Not Tested (See note 5.)
20	MSC and SSC (O)	2.23	Not Tested (See note 6.)
21	MSC, SSC, and Dynamic ASAC Requirements in Support of Bandwidth-constrained links (O)	2.24	Not Tested (See note 6.)
22	Other UC Voice (R)	2.25	Met

(Table continues next page.)

Table 3. SUT Capability Requirements and Functional Requirements Status

CR/FR ID	UCR Requirement (See note 1.)	UCR 2013 Reference	Status
23	Cybersecurity Requirements (R)	4	Met (See note 2.)
24	IPv6 Requirements (R)	5	Met
25	Assured Services - Session Initiation Protocol (AS-SIP 2013)	AS-SIP	Met

NOTE(S):
1. The annotation of 'required' refers to a high-level requirement category. Refer to Reference (e) for the applicability of each sub-requirement.
2. The JITC-led Cybersecurity test team completed security testing and published the results in a separate report, Reference (f).
3. The SUT was not tested or certified for any of the three optional AS-SIP gateway requirements listed in UCR 2013, Change 2, Section 2.11.
4. The SUT met the requirements with the exceptions noted in Table 1. DISA accepted the Vendor's POA&M and adjudicated these exceptions as minor. With DTR 31, the SUT status for Preset Conferencing requirements changed from "Partially Met" to "Met" with resolution of TDR CIS-0787-001, as noted in Table 1.
5. The SUT does not support this optional/conditional requirement.
6. This optional requirement applies specifically to a Local Session Controller. The optional requirements for Master Session Controller and Subtended Session Controller were not tested and are not included in this certification.

LEGEND:

ASAC	Assured Services Admission Control	MSC	Master Session Controller
AS-SIP	Assured Services Session Initiation Protocol	O	Optional
C	Conditional	POA&M	Plan of Action and Milestones
CCA	Call Connection Agent	R	Required
CIS	Cisco	SC	Session Controller
CR	Capability Requirement	SS	Softswitch
DISA	Defense Information Systems Agency	SSC	Subtended Session Controller
FR	Functional Requirement	SUT	System Under Test
ID	Identification	TDR	Test Discrepancy Report
IPv6	Internet Protocol version 6	UC	Unified Capabilities
JITC	Joint Interoperability Test Command	UCR	Unified Capabilities Requirements

Table 4. DoDIN APL Product Summary

Product Identification				
Product Name	Cisco ESC21			
Software Release	15 (See note 1.)			
UCR Product Type(s)	ESC or LSC			
Product Description	ESC for Type 1, 2, and 3 Environments or as an LSC.			
Product Components	**Component Name** (See notes 2 and 3.)	**Environment**	**Version**	**Remarks**
UCM	**Cisco Unified Communications Manager**	HE, Env 1	15.0.1.10000-32	See note 4.
Session Management Edition	**Cisco Session Management Edition**	HE	15.0.1.10000-32	See note 4.
Instant Messaging & Presence Server	**Instant Messaging & Presence Server**	HE, Env 1	15.0.1.10000-10	See note 5.
Cisco Unity Connection	**Cisco Unity Connection**	HE, Env 1	15.0.1.10000-24	See note 6.
MCU	**CMS**	HE, Env 1	3.6	See note 7.
E911 Management System	**Cisco Emergency Responder**	HE, Env 1	15.0.1.10000-34	See note 8.
Cisco Expressway Select Control	**Cisco Expressway Select Control Server**	Env 1, 2, 3	X15.0	See note 9.
Expressway Edge	**Cisco Expressway Select Edge Server**	Env 1, 2, 3	X15.0	See note 9.
Customer Premise Equipment	**Cisco UCCX**	HE, Env 1	12.5SU1	
	Cisco Finesse Web Application	Env 1, 2, 3	12.5SU1	

(Table continues next page.)

Table 4. DoDIN APL Product Summary (continued)

Product Components	Component Name (See notes 2 and 3.)	Environment	Version	Remarks
IWG	IWG on 4321 ISR, IWG on 4461 ISR, IWG on 4331 ISR, IWG on 4351 ISR, IWG on 4431 ISR, **IWG on 4451-X ISR**, IWG on ASR 1001-X, **IWG on ASR 1002-X**, IWG on ASR 1004, IWG on ASR 1006,	HE, Env 1, 2	IOS XE 17.12.02	IWG provides connectivity to AS-SIP trunks. (See note 10.)
	IWG on ASR 1006-X		IOS XE 17.15.01a	
IWG	**IWG on CSR 1000v**	HE, Env 1, 2	IOS XE 17.03.03	
IWG	**IWG on C8200-1N-4T**, IWG on C8200L-1N-4T, **IWG on C8300-1N1S-4T2X**, IWG on C8300-1N1S-6T, IWG on C8300-2N2S-6T, IWG on C8300-2N2S-4T2X	HE, Env 1, 2	IOS XE 17.15.01a	IWG provides connectivity to AS-SIP trunks. (See note 11.)
IWG	**IWG on C8000v series router**	HE, Env 1, 2	IOS XE 17.15.01a	IWG provides connectivity to AS-SIP trunks. See note 12.
SBC	SBC on 4321 ISR, SBC on 4461 ISR, SBC on 4331 ISR, SBC on 4351 ISR, SBC on 4431 ISR, **SBC on 4451-X ISR**, SBC on ASR 1001-X, **SBC on ASR 1002-X**, SBC on ASR 1004, SBC on ASR 1006,	HE, Env 1, 2	IOS XE 17.12.02	SBC provides connectivity to AS-SIP trunks. (See note 10.)
	SBC on ASR 1006-X		IOS XE 17.15.01a	
SBC	**SBC on CSR 1000v**	HE, Env 1, 2	IOS XE 17.03.03	
SBC	**SBC on C8200-1N-4T**, SBC on C8200L-1N-4T, **SBC on C8300-1N1S-4T2X**, SBC on C8300-1N1S-6T, SBC on C8300-2N2S-6T, SBC on C8300-2N2S-4T2X	HE, Env 1, 2	IOS XE 17.15.01a	SBC provides connectivity to AS-SIP trunks. (See note 11.)
SBC	**SBC on C8000v series router**	HE, Env 1, 2	IOS XE 17.15.01a	SBC provides connectivity to AS-SIP trunks. (See note 12.)
IWG/SBC	IWG/SBC on 4321 ISR, IWG/SBC on 4461 ISR, IWG/SBC on 4331 ISR, IWG/SBC on 4351 ISR, IWG/SBC on 4431 ISR, **IWG/SBC on 4451-X ISR**, IWG/SBC on ASR 1001-X,	HE, Env 1, 2	IOS XE 17.12.02	IWG/SBC provides connectivity to AS-SIP trunks. (See note 10.)
IWG/SBC	**IWG/SBC on ASR 1002-X**, IWG/SBC on ASR 1004, IWG/SBC on ASR 1006	HE, Env 1, 2	IOS XE 17.12.02	IWG/SBC provides connectivity to AS-SIP trunks. (See note 10.)
	IWG/SBC on ASR 1006-X		IOS XE 17.15.01a	
IWG/SBC	**IWG/SBC on CSR 1000v**	HE, Env 1, 2	IOS XE 17.03.03	
IWG/SBC	**IWG/SBC on C8200-1N-4T**, IWG/SBC on C8200L-1N-4T, **IWG/SBC on C8300-1N1S-4T2X**, IWG/SBC on C8300-1N1S-6T, IWG/SBC on C8300-2N2S-6T, IWG/SBC on C8300-2N2S-4T2X	HE, Env 1, 2	IOS XE 17.15.01a	IWG/SBC provides connectivity to AS-SIP trunks. (See note 11.)
IWG/SBC	**IWG/SBC on C8000v series router**	HE, Env 1, 2	IOS XE 17.15.01a	IWG/SBC provides connectivity to AS-SIP trunks. (See note 12.)

(Table continues next page.)

Table 4. DoDIN APL Product Summary (continued)

Product Components	Component Name (See notes 2 and 3.)	Environment	Version	Remarks
Media Gateway	4321 ISR, 4331 ISR, 4351 ISR, 4431 ISR, **4451-X ISR**, 4461 ISR with the following T1/E1 cards: **NIM-2MFT T1/E1**, NIM-1MFT-T1/E1, NIM-4MFT-T1/E1, NIM-8MFT-T1/E1	HE, Env 1, 2	IOS XE 17.12.02	See note 13.
Media Gateway	**C8200-1N-4T** C8200L-1N-4T	HE, Env 1, 2	IOS XE 17.15.01a	See note 13.
Media Gateway	C8300-1N1S-6T, **C8300-1N1S-4T2X**, C8300-2N2S-6T, C8300-2N2S-4T2X with the following service and network interface modules**:** **NIM-2MFT T1/E1**, NIM-1MFT-T1/E1, NIM-4MFT-T1/E1, NIM-8MFT-T1/E1	HE, Env 1, 2	IOS XE 17.15.01a	See notes 13 and 14.
Analog Voice Gateway	4321 ISR, 4331 ISR, 4351 ISR, 4431 ISR, **4451-X ISR**, 4461 ISR with the following network interface modules: **NIM-4FXSP**, NIM-2FXSP	HE, Env 1, 2	IOS XE 17.12.02	See note 13.
Analog Voice Gateway	VG400-2FXS/2FXO, **VG400-4FXS/4FXO**, VG400-6FXS/6FXO, VG400-8FXS,	Env 1, 2	IOS XE 17.15.01a	See note 13.
Analog Voice Gateway	**VG450-144FXS**	Env 1, 2	IOS XE 17.15.01a	See note 13.
Analog Voice Gateway	VG420-144FXS VG420-132FXS/6FXO VG420-84FXS/6FXO **SM-X-72FXS**, SM-X-8FXS/12FXO, SM-X-16FXS/2FXO, SM-X-24FXS/4FXO, **NIM-4FXSP**, NIM-2FXSP, NIM-2FXSP/4FXOP	Env 1, 2	IOS XE 17.15.01a	See note 13.
Analog Voice Gateway	VG410-24FXS VG410-24FXS/4FXO VG410-48FXS	Env 1, 2	IOS XE 17.15.01a	See note 15.
Analog Voice Gateway	C8200-1N-4T C8200L-1N-4T	Env 1, 2	IOS XE 17.15.01a	See note 11.
Analog Voice Gateway	C8300-1N1S-6T C8300-1N1S-4T2X C8300-2N2S-6T C8300-2N2S-4T2X**:** NIM-2FXSP, NIM-2FXSP/4FXOP, **NIM-4FXSP**	HE, Env 1, 2	IOS XE 17.15.01a	See notes 11 and 13.
Media Termination Point (MTP)	MTP on 4321 ISR MTP on 4331 ISR MTP on 4351 ISR MTP on 4431 ISR **MTP on 4451-X ISR** MTP on 4461 ISR	HE, Env 1, 2	IOS XE 17.12.02	IPv4 to IPv6 Interworking (See note 16.)
Media Termination Point (MTP)	C8200-1N-4T C8200L-1N-4T	HE, Env 1, 2	IOS XE 17.15.01a	IPv4 to IPv6 Interworking (See note 16.)
Media Termination Point (MTP)	C8300-1N1S-6T C8300-1N1S-4T2X C8300-2N2S-6T C8300-2N2S-4T2X	HE, Env 1, 2	IOS XE 17.15.01a	IPv4 to IPv6 Interworking (See note 16.)
Jabber (Voice and Video Soft Client)	**Cisco Jabber for Windows**	Env 1, 2, 3	14.1.2.57135 (Build 307135)	See note 17.

(Table continues next page.)

Table 4. DoDIN APL Product Summary (continued)

Product Components	Component Name (See notes 2 and 3.)	Environment	Version	Remarks
IP Phone (Voice)	**IP Phone 7811**	Env 1, 2, 3	sip78xx.14-2-1 -0101-26	See note 18.
IP Phone (Voice)	IP Phone 7821	Env 1, 2, 3	sip78xx.14-2-1 -0101-26	See note 18.
IP Phone (Voice)	**IP Phone 7841**	Env 1, 2, 3	sip78xx.14-2-1 -0101-26	See note 18.
IP Phone (Voice)	IP Phone 7861	Env 1, 2, 3	sip78xx.14-2-1 -0101-26	See note 18.
IP Phone Tempest	IP Phone 88XX	Env 1, 2, 3	sip78xx.14-2-1 -0101-26	See note 18.
IP Phone (Voice and Video)	Unified IP Phone 8811	Env 1, 2, 3	sip78xx.14-2-1 -0101-26	See note 18.
IP Phone (Voice and Video)	Unified IP Phone 8831 Conference Phone	Env 1, 2, 3	sip78xx.14-2-1 -0101-26	See note 18.
IP Phone (Voice and Video)	API EM-8831-xx	Env 1, 2, 3	sip78xx.14-2-1 -0101-26	See note 18.
IP Phone (Voice and Video)	Unified IP Phone 8851 and 8851NR	Env 1, 2, 3	sip78xx.14-2-1 -0101-26	See note 18.
IP Phone (Voice and Video)	API EM-8851–xx	Env 1, 2, 3	sip78xx.14-2-1 -0101-26	See note 18.
IP Phone (Voice and Video)	CIS DTD-8851-01	Env 1, 2, 3	sip78xx.14-2-1 -0101-26	See note 18.
IP Phone (Voice and Video)	**Unified IP Phone 8841**	Env 1, 2, 3	sip78xx.14-2-1 -0101-26	See note 18.
IP Phone (Voice and Video)	API EM-8841–xx	Env 1, 2, 3	sip78xx.14-2-1 -0101-26	See note 18.
IP Phone (Voice and Video)	API EL1-8841–xx	Env 1, 2, 3	sip78xx.14-2-1 -0101-26	See note 18.
IP Phone (Voice and Video)	CIS DTD-8841-01	Env 1, 2, 3	sip78xx.14-2-1 -0101-26	See note 18.
IP Phone (Voice and Video)	CIS DTD-8841T-01-L1	Env 1, 2, 3	sip78xx.14-2-1 -0101-26	See note 18.
IP Phone (Voice and Video)	CIS DTD-8841-02	Env 1, 2, 3	sip78xx.14-2-1 -0101-26	See note 18.
IP Phone (Voice and Video)	**Unified IP Phone 8845**	Env 1, 2, 3	sip78xx.14-2-1 -0101-26	See note 18.
IP Phone (Voice and Video)	Unified IP Phone 8861	Env 1, 2, 3	sip78xx.14-2-1 -0101-26	See note 18.
IP Phone (Voice and Video)	**Unified IP Phone 8865**, 8865NR	Env 1, 2, 3	sip78xx.14-2-1 -0101-26	See note 18.
IP Phone (ROEI Voice and Video)	**Unified IP Phone 8875**, 8875 NR	Env 1, 2, 3	PHONEOS-8875.2-1-1-0001-11	See note 19.
0001-1Expansion Module	Unified IP Phone KEM Expansion module for 8800 series IP Phones	Env 1, 2, 3	Not Applicable	
Conference Phone	Cisco IP Conference Phone 8832	Env 1, 2, 3	sip78xx.14-2-1 -0101-26	See note 18.
Conference Phone	Cisco IP Conference Phone 8832 NR	Env 1, 2, 3	sip78xx.14-2-1 -0101-26	See note 18.
Conference Phone	Cisco IP Conference Phone 7832	Env 1, 2, 3	sip78xx.14-2-1 -0101-26	See note 18.
Video Teleconference	Cisco Room 55, Cisco Room 55 Single NR, Cisco Room 55 Dual, Cisco Room 55 Dual NR, Cisco Room 70 G2 Single, Cisco Room 70 G2 Single NR, Cisco Room 70 G2 Dual NR, Cisco Room 70d, Cisco Room 70s Endpoints	Env 1, 2, 3	RoomOS 11.14.3.0	Video Teleconference Codec PEI (See note 20).

(Table continues next page.)

Table 4. DoDIN APL Product Summary (continued)

Product Components	Component Name (See notes 2 and 3.)	Environment	Version	Remarks
Video Teleconference	Cisco Room Kit, Cisco Room Kit NR, **Cisco Room Kit Mini**, Cisco Room Kit Mini NR, Cisco Room Kit Plus, Cisco Room Kit Plus NR, Cisco Room Kit Pro, Cisco Room Kit Pro NR Endpoints	Env 1, 2, 3	RoomOS 11.14.3.0	Video Teleconference Codec PEI (See note 20.)
Video Teleconference	Cisco Board 55, Cisco Board 55S, Cisco Board 70, Cisco Board 70S, and Cisco Board 85S Endpoints	Env 1, 2, 3	RoomOS 11.14.3.0	Video Teleconference Codec PEI (See note 20.)
Video Teleconference	**Cisco Desk Pro**, Cisco Desk Pro NR Endpoints	Env 1, 2, 3	RoomOS 11.14.3.0	Video Teleconference Codec PEI (See notes 20 and 21.)
Video Teleconference	Cisco Desk, Cisco Desk NR	Env 1, 2, 3	RoomOS 11.14.3.0	Video Teleconference Codec PEI (See notes 20 and 21.)
Video Teleconference	Cisco Room Panorama, Cisco Room Panorama NR, Cisco Room 70 Panorama, and Cisco Room 70 Panorama NR Endpoints	Env 1, 2, 3	RoomOS 11.14.3.0	Video Teleconference Codec PEI (See note 20.)
Video Teleconference	Cisco Room 70S NR and Cisco Room 70D NR Endpoints	Env 1, 2, 3	RoomOS 11.14.3.0	Video Teleconference Codec PEI (See note 20.)
Video Teleconference	Cisco Desk Hub	Env 1, 2, 3	RoomOS 11.1.2	See note 22.
Video Teleconference	Cisco Desk Mini, Cisco Desk Mini NR, Cisco Board Pro 55, Cisco Board Pro 55 NR, Cisco Board Pro 75, and Cisco Board Pro 75 NR Endpoints	Env 1, 2, 3	RoomOS 11.14.3.0	Video Teleconference Codec PEI (See notes 20 and 22.)
Video Teleconference	Cisco Room Bar Cisco Room Bar NR Endpoints	Env 1, 2, 3	RoomOS 11.14.3.0	Video Teleconference Codec PEI (See notes 20 and 23.)
Video Teleconference	Cisco Room Kit EQ Cisco Room Kit EQ NR	Env 1, 2, 3	RoomOS 11.14.3.0	Video Teleconference Codec PEI (See notes 20 and 24.)
Video Teleconference	Cisco Room Bar Pro Cisco Room Bar Pro NR	Env 1, 2, 3	RoomOS 11.14.3.0	Video Teleconference Codec PEI (See notes 20 and 25.)
Video Teleconference	Cisco Room Kit EQX Cisco Room Kit EQX NR	Env 1, 2, 3	RoomOS 11.14.3.0	Video Teleconference Codec PEI (See notes 20 and 26.)
Video Teleconference	Cisco Board Pro G2 55 Cisco Board Pro G2 55 NR Cisco Board Pro G2 75 Cisco Board Pro G2 75 NR	Env 1, 2, 3	RoomOS 11.14.3.0	Video Teleconference Codec PEI (See note 27.)

(Table continues next page.)

Table 4. DoDIN APL Product Summary (continued)

Product Components	Component Name (See notes 2 and 3.)	Environment	Version	Remarks
Soft Client	CMS (WebRTC)	HE, Env 1	3.6	See note 28.
Cisco Desk Phone 9800 Series (ROEI Voice)	**DP-9841** **DP-9851** DP-9861 DP-9871	Env 1, 2, 3	PHONEOS 3.0.1	See note 29.
Analog PSTN mode DSCD	**GD vIPer** (See note 30.)	Env 1, 2, 3	6.1.2.1/6.1.2.2	Site-Provided
SCCP and SIP modes DSCD	**GD IP vIPer** (See note 30.)	Env 1, 2, 3	6.1.2.1/6.1.2.2	Site-Provided

NOTE(S):
1. The SUT was initially certified with Software Release version 14. Subsequent DTR(s) updated the Software Release version as follows: DTR 51 – from 14 to 15.
2. Components bolded and underlined were tested by JITC. The other components in the family series were not tested but are also certified for joint use. JITC certifies those additional components because they utilize the same software and similar hardware and JITC analysis determined them to be functionally identical for interoperability certification purposes.
3. A comprehensive list of supported hardware configurations can be found by selecting the "Cisco Unified Communications on the Cisco Unified Computing System" link at the following URL: https://www.cisco.com/c/dam/en/us/td/docs/voice_ip_comm/uc_system/virtualization/cisco-collaboration-virtualization.html.
4. With DTR 12, the Cisco UCM and Cisco SME software versions were updated from 14.0.1.11005-1 to 14.0.1.12015-1. With DTR 20, the Cisco UCM and Cisco SME software versions were updated from 14.0.1.12015-1 to 14 SU2 (14.0.1.12900-161). With DTR 27, the Cisco UCM and Cisco SME software versions were updated from 14 SU2 (14.0.1.12900-161) to 14.0.1.13033-2. With DTR 37, the Cisco UCM Cisco SME software versions were updated from 14.0.1.13033-2 to 14.0.1.14890-65 based on testing conducted by JITC 12-16 June 2023. This software update will also update any noted SIP end point to the appropriate sip(x) load version. With DTR 51, the Cisco UCM and Cisco SME software versions were updated from 14.0.1.14890-65 to 15.0.1.10000-32.
5. With DTR 21, the Cisco Instant Messaging and Presence Server software version was updated from 14.0.1.10000-16 to 14 SU2 (14.0.1.12901-1). With DTR 52, the Cisco Instant Messaging and Presence Server software version was updated from 14 SU2 (14.0.1.12901-1) to 15.0.1.10000-10.
6. With DTR 22, the Cisco Unity Connection software version was updated from 14.0.1.10000-19 to 14 SU2 (14.0.1.12900-69). With DTR 53, the Cisco Unity Connection software version was updated from SU2 (14.0.1.12900-69) to 15.0.1.10000-24.
7. With DTR 13, the capability of the CMS web application, previously tested under DTR 3, was updated to also function through Cisco Expressway, previously tested under DTR 2. With DTR 30, the software version on the CMS was updated from 3.3 to 3.6.
8. With DTR 23, the CER software version was updated from 14.0.1.10000-7 to 14 SU2. With DTR 54, the CER software version was updated from 14 SU2 to 15.0.1.10000-34.
9. With DTR 2, the Cisco Expressway Control and Cisco Expressway Edge was updated from Rel. X12.6 to Rel. X14. With DTR 36, the Cisco Expressway Control and Cisco Expressway Edge software versions were updated from X14.0 (X14.0.3) to X14.2. With DTR 41, the Cisco Expressway component name was rebranded to Cisco Expressway Select, and the Cisco Expressway Select Control and Cisco Expressway Select Edge software versions were updated from X14.2 to X14.3. With DTR 56, the Cisco Expressway Select Control and Cisco Expressway Edge software versions were updated from X14.3 to X15.0.
10. With DTR 4, the IWG/SBC IOS XE software versions on the ISR 4000 series and ASR 1000 series router platforms were updated from 17.03 to 17.06.01a via analysis (no testing), based on similar hardware and operation on the same IOS XE 17.06.01a software previously tested and certified via TN 1726201 DTR 9, Reference (g), and TN 1807401 DTR 6, Reference (h). Note, the Vendor documentation refers to 17.06.01a as 17.6. With DTR 14, the IWG/SBC IOS XE software versions on the ISR 4000 series and ASR 1000 series router platforms were updated from 17.06.01a to 17.6.2 based on analysis (no testing). With DTR 26, the IWG/SBC IOS XE software versions on the ISR 4000 series and the ASR 1000 series of router platforms were updated from 17.6.2 to 17.9. DTR 45 updated the IWG/SBC IOS XE software version from 17.9 to 17.12 on the ISR 4000 series, ASR 1000 series, C8300 series, C8200 series, and C8000v series of router platforms. With DTR 45 updated the IWG/SBC IOS XE software version from 17.9 to 17.12 on the ISR 4000 series, ASR 1000 series, C8300 series, C8200 series, and C8000v series of router platforms. With DTR 62, the IWG/SBC IOS XE software version was updated from 17.12 to 17.15 on the ASR 1006-X, C8300 series, C8200 series, and C8000v series of router platforms series of router platforms.
11. With DTR 1, the Cisco C8300 series router was added as an IWG/SBC running IOS XE 17.06.01a via analysis (no testing), based on similar hardware and operation on the same IOS XE 17.06.01a software previously tested and certified via TN 1726201 DTR 9, Reference (g), and TN 1807401 DTR 6, Reference (h). With DTR 7, the Cisco C8200 series router was added via analysis (no testing), based on similar hardware and operation on the same IOS XE 17.06.01a software previously tested and certified via TN 1726201 DTR 10, Reference (g), and TN 1807401 DTR 8, Reference (h). Note, the Vendor documentation refers to 17.06.01a as 17.6. With DTR 14, the IWG/SBC IOS XE software versions on the Cisco C8200 series and Cisco C8300 series router platforms were updated from 17.06.01a to 17.6.2 based on analysis (no testing). With DTR 26, the IWG/SBC IOS XE software versions on the C8300 series and the C8200 series of router platforms were updated from 17.6.2 to 17.9. DTR 45 updated the IWG/SBC IOS XE software version from 17.9 to 17.12 on the ISR 4000 series, ASR 1000 series, C8300 series, C8200 series, and C8000v series of router platforms. With DTR 62, the IWG/SBC IOS XE software versions on the ASR 1006-X, C8300 series, C8200 series, and C8000v series of router platforms were updated from 17.12 to 17.15. With DTR 64, the IOS XE Analog/Voice Gateway software versions on the C8200 series, C8300 series, VG400 series, VG410 series, VG420 series, and VG450 series of router platforms was updated from 17.12 to 17.15.

(Table continues next page.)

Table 4. DoDIN APL Product Summary (continued)

NOTE(S): (continued)
12. With DTR 8, the Cisco C8000v series router was added as an IWG/SBC running IOS XE 17.06.01a via analysis (no testing), based on similar hardware and operation on the same IOS XE 17.06.01a software previously tested and certified via TN 1726201 DTR 11, Reference (g), and TN 1807401 DTR 9, Reference (h). Note, the Vendor documentation refers to 17.06.01a as 17.6. Virtual Machine images were hosted by VMware ESXi 6.7.0 running on Cisco UCSC-C220-M5 Rack Server. With DTR 14, the IWG/SBC IOS XE software version on the Cisco C8000v series router was updated from 17.06.01a to 17.6.2 based on analysis (no testing). With DTR 26, the IWG/SBC IOS XE software version on the C8000v series of router platforms was updated from IOS XE 17.6.2 to 17.9. DTR 45 updated the IWG/SBC IOS XE software version from 17.9 to 17.12 on the ISR 4000 series, ASR 1000 series, C8300 series, C8200 series, and C8000v series of router platforms. With DTR 62, the IWG/SBC IOS XE software versions on the ASR 1006-X, C8300 series, C8200 series, and C8000v series of router platforms were updated from 17.12 to 17.15.
13. With DTR 5, the MG IOS XE software versions on the ISR 4000 series and the VG450 were updated from 17.03 to 17.06.01a via analysis (no testing), based on similar hardware and operation on the same IOS XE 17.06.01a software previously tested and certified for an MG via TN 1807401 DTR 7, Reference (h). The VG450 was not tested as part of DTR 7 via TN 1807401, but analog end instruments were tested with the 4451-X in the same manner they would be tested with the VG450, and therefore the ISR 4000 series DTR 7 test results apply to the VG450 for certification purposes with this DTR 5. Note, the Vendor documentation refers to 17.06.01a as 17.6. With DTR 15, the MG IOS XE software version on the ISR 4000 series and VG450 was updated from 17.06.01a to 17.6.2 based on analysis (no testing). With DTR 27, the MG IOS XE software version on the ISR 4000 series, C8300 series, and VG420 series was updated from 17.6.2 to 17.9. With DTR 28, the IOS XE Analog/Voice Gateway software version on the ISR 4000 series, VG450, VG420 series, and C8300 series was updated from 17.6.2 to 17.9. DTR 46 updated the Media Gateway IOS XE software version from 17.9 to 17.12 on the ISR 4000 series, C8200 series, and C8300 series of router platforms. DTR 47 updated the Analog/Voice Gateway IOS XE software version from 17.9 to 17.12 on the ISR 4000 series, C8200 series, C8300 series, VG400 series, VG450 series, and VG420 series of router platforms. With DTR 63, the IOS XE Media Gateway software versions on the C8200 series, C8300 series of router platforms was updated from 17.12 to 17.15. With DTR 64, the IOS XE Analog/Voice Gateway software versions on the C8200 series, C8300 series, VG400 series, VG410 series, VG420 series, and VG450 series of router platforms was updated from 17.12 to 17.15. In addition, the VG450 gateways (VG450, VG450-144FXS, VG450-72FXS) and VG420 gateways (VG420-144FXS, VG420-132FXS/6FXO, VG420-84FXS/6FXO), with the following NIM modules (NIM-2MFT T1/E1, NIM-1MFT-T1/E1, NIM-4MFT-T1/E1, NIM-8MFT-T1/E1) were removed from the list of Media Gateway components for this SUT with DTR 64 based on JITC analysis and conclusion that the VG450 and VG420 gateways do not function as true Media Gateways in this specific system configuration.
14. With DTR 19 testing conducted by JITC 4-8 April 2022, the C8300 series router was added as an MG and Voice Gateway. With DTR 27, the C8300-2N2S-6T and C8300-2N2S-4T2X modules were added as MGs via analysis (no testing), based on similar hardware and operation on the same IOS XE 17.9.1a software as the previously certified C8300-1N1S-4T2X. With DTR 28, the C8300-2N2S-6T and C8300-2N2S-4T2X modules were added as Analog/Voice Gateways via analysis (no testing), based on similar hardware and operation on the same IOS XE 17.9.1a software as the previously certified C8300-1N1S-4T2X.
15. With DTR 32, the VG420 was added as an analog voice gateway running IOS XE 17.6.2 via analysis (no testing), based on similar hardware and operation on the same IOS XE 17.6.2 software as the previously tested and certified VG 450. With DTR 33, the VG400 running IOS XE 17.9 was added as an analog/voice gateway based on testing conducted by JITC 10-11 April 2023. NOTE: The VG400 does not have the capability to support recovered timing and as a result, does not support optional secure calls (e.g., v.150.1) but does support non-secure voice and fax calls. The VG450, 4400 ISR Series, 8200 Series, and 8300 Series gateways support recovered timing and therefore support secure calls. DTR 47 updated the Analog/Voice Gateway IOS XE software version from 17.9 to 17.12 on the ISR 4000 series, C8200 series, C8300 series, VG400 series, VG450 series, and VG420 series of router platforms. With DTR 55, the VG410-24FXS, VG410-24FXS/4FXO, and VG410-48FXS gateways running IOS XE 17.12 were added as analog/voice gateways via analysis (no testing), based on similar hardware and operation on the same IOS XE 17.12 software as the previously tested and certified VG400-4FXS/4FXO. With DTR 64, the IOS XE Analog/Voice Gateway software versions on the C8200 series, C8300 series, VG400 series, VG410 series, VG420 series, and VG450 series of router platforms was updated from 17.12 to 17.15.
16. With DTR 6, the IOS XE software on the ISR 4000 series for MTP functionality was updated from 17.3 to 17.06.01a based on analysis (no testing) and review of the Vendor's release notes, with no notable changes in the IOS XE software update from 17.3 to 17.06.01a (referenced in the Vendor documentation as 17.6) that would affect the functionality of the ISR 4000 series as an MTP. With DTR 16, the IOS XE software version on the ISR 4000 series for MTP functionality was updated from 17.06.01a to 17.6.2 based on analysis (no testing). With DTR 29, the IOS XE software version on the ISR 4000 series for MTP functionality was updated from 17.6.2 to 17.9. DTR 48 updated the MTP functionality with software version IOS XE update from 17.9 to 17.12 on the ISR 4000 series, C8200 series, and C8300 series of router platforms. With DTR 65, the IOS XE software versions on the C8200 series and C8300 series of router platforms for MTP functionality was updated from 17.12 to 17.15.
17. With DTR 35, the Cisco Jabber for Windows software version was updated from 14 (14.0.1.55914 [Build 305914]) to 14.1 (14.1.2.57135 [Build 307135]).
18. With DTR 37, the sip(x) end instrument software versions were updated from 14-1-1-0001-125 to 14-2-1-0001-14 with the DTR 37 software version update on the UCM and SME from 14.0.1.13033-2 to 14.0.1.14890-65. With DTR 51, the sip(x) end instrument software versions were updated from 14-2-1-0001-14 to 14-2-1-0101-26 with the DTR 51 software version update on the UCM and SME from 14.0.1.14890-65 to 15.0.1.10000-32.
19. With DTR 34, the Cisco 8875 voice and video IP phone was added based on testing conducted by JITC 19-21 April 2023. With DTR 42, the Cisco 8875 and 8875NR voice and video IP phones software version was updated from PHONEOS-8875.2-0-1-0001-16 to PHONEOS-8875.2-1-1-0001-11 based on testing conducted by JITC 12-16 June 2023. PHONEOS is certified as an ROEI.

(Table continues next page.)

Table 4. DoDIN APL Product Summary (continued)

NOTE(S): (continued)
20. With DTR 9, the Cisco CE software name was rebranded to Cisco RoomOS and updated Rel. CE 9.14 to Rel. RoomOS 10.8. With DTR 17, the Cisco RoomOS software version was updated from 10.8 to 10.11 on all teleconference codecs within ESC21. With DTR 24, the Cisco RoomOS software version was updated from 10.11 to 10.19 on all teleconference codecs within ESC21. With DTR 39, the Cisco RoomOS software version was updated from 10.19 to 11.1.2 on all teleconference codecs within ESC21, except the Cisco Room Panorama, Cisco Room Panorama NR, Cisco Room 70 Panorama, and Cisco Room 70 Panorama NR. With DTR 43, all teleconference codecs were rebranded by removing Webex from the name, and the Cisco RoomOS software version was updated from 11.1 to 11.5 on all teleconference codecs within ESC21, except the Cisco Desk Hub. With DTR 49, the Cisco RoomOS software version was updated from 11.5 to 11.9 on all teleconference codecs within ESC21, except the Cisco Desk Hub. With DTR 59, the Cisco RoomOS software version was updated from 11.9 to 11.14 on all teleconference codecs, except the Cisco Desk Hub.
21. With DTR 10, the Cisco Desk and Cisco Desk NR endpoints were added to the currently certified family of endpoints on ESC21 with Rel. RoomOS 10.8. With DTR 24, the Cisco RoomOS software version was updated from 10.11 to 10.19 on all teleconference codecs within ESC21. With DTR 39, the Cisco RoomOS software version was updated from 10.19 to 11.1.2 on all teleconference codecs within ESC21, except the Cisco Room Panorama, Cisco Room Panorama NR, Cisco Room 70 Panorama, and Cisco Room 70 Panorama NR. With DTR 43, all teleconference codecs were rebranded by removing Webex from the name, and the Cisco RoomOS software version was updated from 11.1 to 11.5 on all teleconference codecs within ESC21, except the Cisco Desk Hub. With DTR 49, the Cisco RoomOS software version was updated from 11.5 to 11.9 on all teleconference codecs within ESC21, except the Cisco Desk Hub.
22. With DTR 18, the Desk Mini, Desk Mini NR, Desk Hub, Board Pro 55, Board Pro 55 NR, Board Pro 75, and Board Pro 75 NR endpoints were added to the currently certified family of endpoints on ESC21 with Rel. RoomOS 10.11. With DTR 24, the Cisco RoomOS software version was updated from 10.11 to 10.19 on all teleconference codecs within ESC21. With DTR 39, the Cisco RoomOS software version was updated from 10.19 to 11.1.2 on all teleconference codecs within ESC21, except the Cisco Room Panorama, Cisco Room Panorama NR, Cisco Room 70 Panorama, and Cisco Room 70 Panorama NR. With DTR 43, all teleconference codecs were rebranded by removing Webex from the name, and the Cisco RoomOS software version was updated from 11.1 to 11.5 on all teleconference codecs within ESC21, except the Cisco Desk Hub. With DTR 49, the Cisco RoomOS software version was updated from 11.5 to 11.9 on all teleconference codecs within ESC21, except the Cisco Desk Hub.
23. With DTR 25, the Room Bar and Cisco Room Bar NR endpoints were added to the currently certified family of endpoints on ESC21 with Rel. RoomOS 10.19. With DTR 39, the Cisco RoomOS software version was updated from 10.19 to 11.1.2 on all teleconference codecs within ESC21, except the Cisco Room Panorama, Cisco Room Panorama NR, Cisco Room 70 Panorama, and Cisco Room 70 Panorama NR. With DTR 43, all teleconference codecs were rebranded by removing from the name, and the Cisco RoomOS software version was updated from 11.1 to 11.5 on all teleconference codecs within ESC21, except the Cisco Desk Hub. With DTR 49, the Cisco RoomOS software version was updated from 11.5 to 11.9 on all teleconference codecs within ESC21, except the Cisco Desk Hub.
24. With DTR 40, the Cisco Room Kit EQ and Cisco Room Kit EQ NR endpoints were added to the currently certified family of VTC endpoints on ESC21 with Rel. RoomOS 11.1.2 via analysis and similarity to previously certified endpoints (no testing). With DTR 43, all teleconference codecs were rebranded by removing Webex from the name, and the Cisco RoomOS software version was updated from 11.1 to 11.5 on all teleconference codecs within ESC21, except the Cisco Desk Hub. With DTR 43, the "Webex" brand name was also removed from all other notes in this table where applicable. With DTR 49, the Cisco RoomOS software version was updated from 11.5 to 11.9 on all teleconference codecs within ESC21, except the Cisco Desk Hub.
25. With DTR 44, the Cisco Room Bar Pro and Cisco Room Bar Pro NR endpoints were added to the currently certified family of VTC endpoints on ESC21 with Release RoomOS 11.5 via analysis and similarity to previously certified endpoints (no testing). With DTR 49, the Cisco RoomOS software version was updated from 11.5 to 11.9 on all teleconference codecs within ESC21, except the Cisco Desk Hub.
26. With DTR 50, the Cisco Room Kit EQX and Cisco Room Kit EQX NR endpoints were added to the currently certified family of VTC endpoints on ESC21 with Rel. RoomOS 11.9 via analysis and similarity to previously certified endpoints (no testing).
27. With DTR 60, the Cisco Board Pro G2 55, Cisco Board Pro G2 55 NR, Cisco Board Pro G2 75, and Cisco Board Pro G2 75 NR endpoints were added to the currently certified family of VTC endpoints on ESC21 with Rel. RoomOS 11.14 via analysis and similarity to previously certified endpoints (no testing).
28. With DTR 3, the WebRTC was added to the ESC21 certification with Rel. 3.3.0.1. With DTR 30, the software version on the CMS (WebRTC) Soft Client web application was updated from 3.3 to 3.6.
29. With DTR 57, the Cisco Desk Phone 9800 Series (ROEI Voice) endpoints, DP-9841 and DP-9851, were added with software version PHONEOS 3.0.1 based on testing conducted by JITC 6-7 May 2024. With DTR 61, the Cisco DP-9861 and DP-9871 endpoints were added with software version PHONEOS 3.0.1 via analysis and similarity to the previously certified Cisco DP 9800 Series ROEIs (no testing).
30. Although the SUT was tested and is certified with this GD vIPer DSCD version, JITC analysis determined the SUT is also certified with other versions previously and currently listed on the DoDIN APL as denoted under a separate tracking number for the GD vIPer DSCD.

(Table continues next page.)

Table 4. DoDIN APL Product Summary (continued)

LEGEND:			
API	Application Programming Interface	LSC	Local Session Controller
APL	Approved Products List	Mbps	Megabits per second
ASR	Aggregated Services Router	MCU	Multipoint Conference Unit
AS-SIP	Assured Services Session Initiation Protocol	MG	Media Gateway
CE	Collaboration Endpoint	MTP	Media Termination Point
CER	Cisco Emergency Responder	NR	No Radio
CIS	Cisco	OS	Operating System
CMS	Cisco Meeting Server	PEI	Proprietary End Instrument
CSR	Cisco Cloud Services Router	PSTN	Public Switched Telephone Network
DoDIN	Department of Defense Information Network	Rel.	Release
DP	Desk Phone	ROEI	Routine Only End Instrument
DSCD	DoD Secure Communications Device	SBC	Session Border Controller
DTR	Desktop Review	SCCP	Skinny Call Control Protocol
E1	European Basic Multiplex Rate (2.048 Mbps)	SIP/sip	Session Initiation Protocol
E911	Enhanced 911	SME	Session Management Edition
Env	Environment (Type 1, 2, 3)	SU	Service Update
ESC	Enterprise Session Controller	T1	Digital Transmission Link Level 1 (1.544 Mbps)
ESXi	Elastic Sky X integrated	TN	Tracking Number
GD	General Dynamics	UCCX	Unified Contact Center Express
HE	Head End	UCM	Unified Communications Manager
IP	Internet Protocol	UCR	Unified Capabilities Requirements
IPv4	IP version 4	URL	Uniform Resource Locator
IPv6	IP version 6	vIPer	Voice over IP Encryptor
ISR	Integrated Services Router	VG	Voice Gateway
IWG	Interworking Gateway	VM	Virtual Machine
JITC	Joint Interoperability Test Command	VTC	Video Teleconferencing
KEM	Key Expansion Module	WebRTC	Web Real-Time Communication

4. Test Details. This extension of the certification is based on DTRs 62, 63, 64, and 65. The original certification, documented in Reference (d), was based on interoperability (IO) testing, review of the Vendor's Letter of Compliance (LoC), Defense Information Systems Agency (DISA) adjudication of open test discrepancy reports (TDRs), and the DISA Certifying Authority Recommendation for inclusion on the DoDIN APL. JITC completed review of the Vendor's LoC on 5 May 2021 and conducted IO testing at the JITC Global Network Test Facility (GNTF), Fort Huachuca, Arizona, from 7 June through 24 June 2021, using test procedures derived from Reference (e). JITC conducted follow-on Verification and Validation (V&V) testing from 23 August through 27 August 2021 to resolve and close several IO discrepancies. DISA adjudicated outstanding TDRs on 14 September 2021. A JITC-led Cybersecurity (CS) test team conducted CS testing and published the results in a separate report, Reference (f). Enclosure 2 of Reference (d) documents the test results and describes the test network and system configurations. Enclosure 3 of Reference (d) provides a detailed list of the interface, capability, and functional requirements and test results.

DTR 62 was requested to update the IWG/SBC IOS XE software version from 17.12 to 17.15 on the ASR 1006-X, C8300 series, C8200 series, and C8000v series of router platforms.

DTR 63 was requested to update the MG IOS XE software version from 17.12 to 17.15 on the C8200 series and the C8300 series of router platforms.

DTR 64 was requested to update the Analog/Voice Gateway IOS XE software version from 17.12 to 17.15 on the C8200 series, C8300 series, VG400 series, VG410 series, VG420 series, and VG450 series of router platforms.

JITC Memo, JTE, Extension of the Joint Interoperability Certification of the Cisco Enterprise Session Controller (ESC) 21 (ESC21) with Software Release 15

DTR 65 was requested to update the MTP functionality with IOS XE software version update from 17.12 to 17.15 on the C8200 series and C8300 series of router platforms.

JITC analysis determined IO testing with CS vulnerability scans was required to validate the software updates did not change the certified IO features and function or approved CS posture of the SUT.

JITC conducted DTRs 62 through 65 multi-vendor IO testing with the updated software from 16 September to 27 September 2024, using test procedures derived from References (i) and (j). Testing included voice call features (call hold, attended and unattended call transfers, and three-party conferencing calls), and voice/video duration calls between the SUT and multiple ESCs/LSCs and their respective Internet Protocol (IP) and analog end instruments depicted in Table 5 (voice) and Table 6 (video).

Table 5. Multi-vendor ESC/LSC with Voice EIs Used for IO Testing

Multi-vendor ESC/LSC Voice EIs			
ESC/LSC/MFS	**Version**	**EI**	**Version**
Avaya Aura® (LSC)	10.2	9608, 96x1	7.1.15.0
Avaya CS2100 (MFS)	SE09.1	Analog/PSTN	NA
Cisco ESC21 (ESC)	15	Cisco 78xx, 88xx	Sip88xx.14-2-1-0101-26
		Analog/PSTN	NA
		J139, J179, J189	4.0.13
NEC UNIVERGE 3C (LSC)	9.2.1.9	HPI Federal LLC CCX 600	8.1.3.1301
		Analog/PSTN	NA
REDCOM Sigma (LSC)	v3.1.1	HPI Edge E E100, E220, E350, E400, and E500	8.2.0.10139
		Analog/PSTN	NA
Unify OpenScape Inc. (LSC)	9.3	Analog/PSTN	NA
		CCX 700	8.1.3.1301
		E350 and E450	8.2.0.10139

LEGEND:

CCX	Communications Collaboration eXperience	LSC	Local Session Controller
CS	Communication Server	MFS	Multifunction Switch
EI	End Instrument	NA	Not Applicable
ESC	Enterprise Session Controller	PSTN	Public Switched Telephone Network
HPI	Hewitt-Packard Inc.	SE	Succession Enterprise
IO	Interoperability	Sip	Session Initiation Protocol
LLC	Limited Liability Company	v	version

Table 6. Multi-vendor LSCs with Video EIs Used for IO Testing

Multi-vendor LSC Video EIs			
LSC	**Version**	**EI**	**Version**
Cisco ESC21	15	Unified IP Phone Voice/Video8811 and 8845	Sip88xx.14-2-1-0001-14
NEC UNIVERGE 3C	9.2.1.9	HPI Federal LLC CCX 600	8.1.3.1301
REDCOM Sigma	v3.1.1	Plantronics VVX 501 and VVX 601 (Voice/Video)	6.4.1.2280
Unify OpenScape Inc.	9.3	CCX 700	8.1.3.1301

LEGEND:

CCX	Communications Collaboration eXperience	LLC	Limited Liability Company
EI	End Instrument	LSC	Local Session Controller
ESC	Enterprise Session Controller	Sip	Session Initiation Protocol
HPI	Hewitt-Packard Inc.	v	version
IO	Interoperability	VVX	Voice and Video Experience
IP	Internet Protocol		

IO testing demonstrated the SUT meets ESC/LSC requirements with the updated software in accordance with Reference (b) with no new IO test discrepancies.

Based on analysis and the IO test results, JITC approves DTRs 62, 63, 64, and 65.

Additionally, the results of the CS vulnerability scans conducted during the test event are documented in a separate report, Reference (f).

5. Additional Information. 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.jitc.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) by e-mail: disa.meade.peo-transport.list.approved-products-certification-of@mail.mil. All associated information is available on the DISA APCO website located at https://aplits.disa.mil/.

JITC Memo, JTE, Extension of the Joint Interoperability Certification of the Cisco Enterprise Session Controller (ESC) 21 (ESC21) with Software Release 15

6. Point of Contact (POC). JITC POC: MAJ Shane Rauss; Phone (667) 891-4544; Teams DSN: 94 (323) 891-4544, FAX (520) 538-4347; E-mail: shane.p.rauss.mil@mail.mil; Mailing Address: Joint Interoperability Test Command, C/O JTE - MAJ Shane Rauss, 2001 Brainard Road (MB59), Fort Huachuca, AZ 85613. The APCO tracking number for the SUT is 2104001.

FOR THE COMMANDER:

MACARI.ELAINE.SUSAN.1067225585 Digitally signed by MACARI.ELAINE.SUSAN.1067225585 Date: 2024.11.26 14:27:35 -07'00'

Enclosure a/s

FOR LAWRENCE T. DORN
Chief
Specialized Test Division

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NGA, Compliance and Assessment Team
DOT&E
Medical Health Systems, JMIS PEO T&IVV
HQUSAISEC, AMSEL-IE-ME
APCO

ADDITIONAL REFERENCES

(c) Defense Information Systems Agency, "Department of Defense Information Network (DoDIN) approval of the VQ Communications Ltd VQ Conference Manager Release (Rel.) 4.x Tracking Number (TN) 2102202 as an Element Management System (EMS)," 30 June 2022
(d) Joint Interoperability Test Command (JITC) Memo, JTE, "Joint Interoperability Certification of the Cisco Enterprise Session Controller (ESC) 21 (ESC21) with Software Release 14," 8 October 2021
(e) JITC, "Enterprise Session Controller (SC) Test Procedures Version 1.0 for Unified Capabilities Requirements (UCR) 2013 Change 2," August 2019
(f) JITC, "Cybersecurity Assessment Report for CISCO Enterprise Session Controller (ESC) 21 (ESC21), Software Release 15, Tracking Number (TN) 2104001," September 2024
(g) JITC Memo, JTE, "Extension of the Joint Interoperability Certification of the Cisco Session Border Controller (SBC) Integrated Services Router (ISR) 4000 Series, Aggregation Services Router (ASR) 1000 Series, and C8000 Series Interworking Gateway (IWG)/SBC, Software Release IOS XE 17.6, DTRs 9, 10 and 11 (Tracking Number (TN) 1726201)," 16 December 2021 Revision 1
(h) JITC Memo, JTE, "Extension of the Joint Interoperability Certification of the Cisco Network-Level SoftSwitch (SS) 18, Software Release 12.5.1, DTRs 6, 7, 8, and 9 (Tracking Number (TN) 1807401)," 30 November 2021 Revision 3
(i) JITC, "Soft Switch (SS) and Session Controller (SC) Test Procedures Version 1.1 for Unified Capabilities Requirements (UCR) 2013 Change 2," October 2022 (Draft)
(j) JITC, "Enterprise Session Controller (ESC) Test Procedures Version 1.1 for Unified Capabilities Requirements (UCR) 2013 Change 2," June 2022 (Draft)