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IN REPLY REFER TO: Joint Interoperability Test Command (JTE) 14 July 2023

MEMORANDUM FOR DISTRIBUTION Revision 1 (See Enclosure 2)

SUBJECT: Extension of the Joint Interoperability Certification of the Cisco Enterprise Session Controller (ESC) 21 (ESC21) with Software Release 14

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

**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 14, 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 (see 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) 37 and 42.

DTR 37 was requested to update the Cisco Unified Communications Manager (UCM) and Cisco Session Management Edition (SME) software versions from 14.0.1.13033-2 to 14.0.1.14890-65, which also updated any noted Session Initiation Protocol (SIP) end point to the appropriate sip(x) load version, and to add the Virtual Machine (VM)ware vSphere hypervisor Elastic Sky X integrated (ESXi) 7.0.2 version for applicable SUT components.

DTR 42 was requested to update the Cisco 8875 and 8875 No Radio (NR) voice and video Internet Protocol (IP) phones software version from PHONEOS-8875.2-0-1-0001-16 to PHONEOS-8875.2-1-1-0001-11.

See Table 4 for an updated list of certified SUT components and Paragraph 4 for the test details.

## Table 1. Conditions

| Description | | Operational Impact | Remarks |
|---|---|---|---|
| **UCR Waivers** | | | |
| None. | | | |
| **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 subsequent 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. |

(Table continues next page.)

## Table 2. SUT Interface Status (continued)

| Interface (See note 1.) | Applicability | Status | Remarks |
|---|---|---|---|
| **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.

**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 | Partially 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 | Partially Met (See note 5.) |
| 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 6.) |
| 19 | Local Attendant Console Features (O) | 2.22 | Not Tested (See note 6.) |
| 20 | MSC and SSC (O) | 2.23 | Not Tested (See note 7.) |
| 21 | MSC, SSC, and Dynamic ASAC Requirements in Support of Bandwidth-constrained links (O) | 2.24 | Not Tested (See note 7.) |
| 22 | Other UC Voice (R) | 2.25 | Partially Met (See note 5.) |
| 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 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 19, the SUT status for Media Gateway requirements changed from "Partially Met" to "Met" with resolution of TDR CIS-0787-007, as noted in Table 1.
6. The SUT does not support this optional/conditional requirement.
7. 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 | 14 | | | |
| 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 1 and 2.) | **Environment** | **Version** | **Remarks** |
| UCM | **Cisco Unified Communications Manager (CUCM)** | HE, Env 1 | 14.0.1.14890-65<br>ESXi 7.0.2 | See note 3. |
| Session Management Edition | **Cisco Session Management Edition (SME)** | HE | 14.0.1.14890-65<br>ESXi 7.0.2 | See note 3. |
| Instant Messaging & Presence Server | **Instant Messaging & Presence Server** | HE, Env 1 | 14 SU2 (14.0.1.12901-1)<br>ESXi 7.0.2 | See note 4. |
| Cisco Unity Connection | **Cisco Unity Connection** | HE, Env 1 | 14 SU2 (14.0.1.12900-69)<br>ESXi 7.0.2 | See note 5. |
| MCU | **Cisco Meeting Server (CMS)** | HE, Env 1 | 3.6<br>ESXi 7.0.2 | See note 6. |
| E911 Management System | **Cisco Emergency Responder (CER)** | HE, Env 1 | 14 SU2<br>ESXi 7.0.2 | See note 7. |
| Cisco Expressway Select Control | **Cisco Expressway Select Control Server** | Env 1, 2, 3 | X14.3 | See note 8. |
| Expressway Edge | **Cisco Expressway Select Edge Server** | Env 1, 2, 3 | X14.3 | See note 8. |
| Customer Premise Equipment | **Cisco Unified Contact Center Express UCCX** | HE, Env 1 | 12.5SU1<br>ESXi 7.0.2 | |
| | **Cisco Finesse Web Application** | Env 1, 2, 3 | 12.5SU1 | |
| 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, IWG on ASR 1006-X | HE, Env 1, 2 | IOS XE 17.9.1a | See note 9. |
| IWG | **IWG on CSR 1000v** | HE, Env 1, 2 | IOS XE 17.03.03<br>ESXi 7.0.2 | |
| 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 17.9.1a | See note 10. |
| IWG | **IWG on C8000v series router** | HE, Env 1, 2 | IOS XE 17.9.1a<br>ESXi 7.0.2 | See note 11. |
| 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, SBC on ASR 1006-X | HE, Env 1, 2 | IOS XE 17.9.1a | See note 9. |
| SBC | **SBC on CSR 1000v** | HE, Env 1, 2 | IOS XE 17.03.03<br>ESXi 7.0.2 | |
| 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 17.9.1a | See note 10. |

(Table continues next page.)

**Table 4. DoDIN APL Product Summary** (continued)

| Product Components | Component Name (See notes 1 and 2.) | Environment | Version | Remarks |
|---|---|---|---|---|
| SBC | **SBC on C8000v series router** | HE, Env 1, 2 | IOS XE 17.9.1a<br>ESXi 7.0.2 | See note 11. |
| IWG/SBC | IWG/SBC on 4321 ISR,<br>IWG/SBC on 4461 ISR,<br>IWG/SBC on 4331 ISR,<br>IWG/SBC on 4351 ISR,<br>IWG/SBC on 4431 ISR,<br>**IWG/SBC on 4451-X ISR**,<br>IWG/SBC on ASR 1001-X, | HE, Env 1, 2 | IOS XE 17.9.1a | See note 9. |
| IWG/SBC | **IWG/SBC on ASR 1002-X**,<br>IWG/SBC on ASR 1004,<br>IWG/SBC on ASR 1006,<br>IWG/SBC on ASR 1006-X | HE, Env 1, 2 | IOS XE 17.9.1a | See note 9. |
| IWG/SBC | **IWG/SBC on CSR 1000v** | HE, Env 1, 2 | IOS XE 17.03.03<br>ESXi 7.0.2 | |
| IWG/SBC | **IWG/SBC on C8200-1N-4T**,<br>IWG/SBC on C8200L-1N-4T,<br>**IWG/SBC on C8300-1N1S-4T2X**,<br>IWG/SBC on C8300-1N1S-6T,<br>IWG/SBC on C8300-2N2S-6T,<br>IWG/SBC on C8300-2N2S-4T2X | HE, Env 1, 2 | IOS XE 17.9.1a | See note 10. |
| IWG/SBC | **IWG/SBC on C8000v series router** | HE, Env 1, 2 | IOS XE 17.9.1a<br>ESXi 7.0.2 | See note 11. |
| Media Gateway | 4321 ISR, 4331 ISR, 4351 ISR,<br>4431 ISR, **4451-X ISR**,<br>4461 ISR with the following T1/E1 cards:<br>**NIM-2MFT T1/E1**,<br>NIM-1MFT-T1/E1, NIM-4MFT-T1/E1,<br>NIM-8MFT-T1/E1 | HE, Env 1, 2 | IOS XE 17.9.1a | See note 12. |
| Analog Voice Gateway | 4321 ISR, 4331 ISR, 4351 ISR,<br>4431 ISR, **4451-X ISR**,<br>4461 ISR with the following network interface modules:<br>**NIM-4FXSP**, NIM-2FXSP | HE, Env 1, 2 | IOS XE 17.9.1a | See note 12. |
| Analog Voice Gateway | **VG450,** VG450-144FXS, VG450-72FXS, VG420-144FXS, VG420-132FXS/6FXO, VG420-84FXS/6FXO with the following service and network interface modules**:**<br>**SM-X-72FXS**, SM-X-8FXS/12FXO,<br>SM-X-16FXS/2FXO,<br>SM-X-24FXS/4FXO, **NIM-4FXSP**,<br>NIM-2FXSP, NIM-2FXSP/4FXOP | Env 1, 2 | IOS XE 17.9.1a | See note 12. |
| Analog Voice Gateway | VG400-2FXS/2FXO, **VG400-4FXS/4FXO**, VG400-6FXS/6FXO, VG400-8FXS | Env 1, 2 | IOS XE 17.9.1a | See note 13. |
| Media Gateway | **VG450**, VG450-144FXS, VG450-72FXS, VG420-144FXS, VG420-132FXS/6FXO, VG420-84FXS/6FXO with the following service and network interface modules**:**<br>**NIM-2MFT T1/E1**, NIM-1MFT-T1/E1,<br>NIM-4MFT-T1/E1, NIM-8MFT-T1/E1 | Env 1, 2 | IOS XE 17.9.1a | See notes 12 and 13. |
| Media Termination Point (MTP) | MTP on 4321 ISR<br>MTP on 4331 ISR<br>MTP on 4351 ISR<br>MTP on 4431 ISR<br>**MTP on 4451-X ISR**<br>MTP on 4461 ISR | HE, Env 1, 2 | IOS XE 17.9.1a | See note 14. |

(Table continues next page.)

**Table 4. DoDIN APL Product Summary** (continued)

| Product Components | Component Name (See notes 1 and 2.) | Environment | Version | Remarks |
|---|---|---|---|---|
| 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 17.9.1a | See notes 12 and 15. |
| Analog Voice Gateway | C8300-1N1S-6T, **C8300-1N1S-4T2X**, C8300-2N2S-6T, C8300-2N2S-4T2X with the following service and network interface modules**:** NIM-2FXSP, NIM-2FXSP/4FXOP, **NIM-4FXSP** | HE, Env 1, 2 | IOS XE 17.9.1a | See note 15. |
| Jabber (Voice and Video Soft Client) | **Cisco Jabber for Windows** | Env 1, 2, 3 | 14.1.2.57135 (Build 307135) | See note 16. |
| IP Phone (Voice) | **IP Phone 7811** | Env 1, 2, 3 | sip78xx.14-2-1 -0001-14 | See note 17. |
| IP Phone (Voice) | IP Phone 7821 | Env 1, 2, 3 | sip78xx.14-2-1 -0001-14 | See note 17. |
| IP Phone (Voice) | **IP Phone 7841** | Env 1, 2, 3 | sip78xx.14-2-1 -0001-14 | See note 17. |
| IP Phone (Voice) | IP Phone 7861 | Env 1, 2, 3 | sip78xx.14-2-1 -0001-14 | See note 17. |
| IP Phone Tempest | IP Phone 88XX | Env 1, 2, 3 | Sip88xx.14-2-1 -0001-14 | See note 17. |
| IP Phone (Voice and Video) | Unified IP Phone 8811 | Env 1, 2, 3 | Sip88xx.14-2-1 -0001-14 | See note 17. |
| IP Phone (Voice and Video) | Unified IP Phone 8831 Conference Phone | Env 1, 2, 3 | Sip88xx.14-2-1 -0001-14 | See note 17. |
| IP Phone (Voice and Video) | API EM-8831-xx | Env 1, 2, 3 | Sip88xx.14-2-1 -0001-14 | See note 17. |
| IP Phone (Voice and Video) | Unified IP Phone 8851 and 8851NR | Env 1, 2, 3 | Sip88xx.14-2-1 -0001-14 | See note 17. |
| IP Phone (Voice and Video) | API EM-8851–xx | Env 1, 2, 3 | Sip88xx.14-2-1 -0001-14 | See note 17. |
| IP Phone (Voice and Video) | CIS DTD-8851-01 | Env 1, 2, 3 | Sip88xx.14-2-1 -0001-14 | See note 17. |
| IP Phone (Voice and Video) | **Unified IP Phone 8841** | Env 1, 2, 3 | Sip88xx.14-2-1 -0001-14 | See note 17. |
| IP Phone (Voice and Video) | API EM-8841–xx | Env 1, 2, 3 | Sip88xx.14-2-1 -0001-14 | See note 17. |
| IP Phone (Voice and Video) | API EL1-8841–xx | Env 1, 2, 3 | Sip88xx.14-2-1 -0001-14 | See note 17. |
| IP Phone (Voice and Video) | CIS DTD-8841-01 | Env 1, 2, 3 | Sip88xx.14-2-1 -0001-14 | See note 17. |
| IP Phone (Voice and Video) | CIS DTD-8841T-01-L1 | Env 1, 2, 3 | Sip88xx.14-2-1 -0001-14 | See note 17. |
| IP Phone (Voice and Video) | CIS DTD-8841-02 | Env 1, 2, 3 | Sip88xx.14-2-1 -0001-14 | See note 17. |
| IP Phone (Voice and Video) | **Unified IP Phone 8845** | Env 1, 2, 3 | Sip88xx.14-2-1 -0001-14 | See note 17. |
| IP Phone (Voice and Video) | Unified IP Phone 8861 | Env 1, 2, 3 | Sip88xx.14-2-1 -0001-14 | See note 17. |
| IP Phone (Voice and Video) | **Unified IP Phone 8865**, 8865NR | Env 1, 2, 3 | Sip88xx.14-2-1 -0001-14 | See note 17. |
| 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 18. |
| 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 | Sip88xx.14-2-1 -0001-14 | See note 17. |

(Table continues next page.)

**Table 4. DoDIN APL Product Summary** (continued)

| Product Components | Component Name (See notes 1 and 2.) | Environment | Version | Remarks |
|---|---|---|---|---|
| Conference Phone | Cisco IP Conference Phone 8832 NR | Env 1, 2, 3 | Sip88xx.14-2-1 -0001-14 | See note 17. |
| Conference Phone | Cisco IP Conference Phone 7832 | Env 1, 2, 3 | Sip88xx.14-2-1 -0001-14 | See note 17. |
| Video Teleconference | Cisco Webex Room 55,<br>Cisco Webex Room 55 Single NR,<br>Cisco Webex Room 55 Dual,<br>Cisco Webex Room 55 Dual NR,<br>Cisco Webex Room 70 G2 Single,<br>Cisco Webex Room 70 G2 Single NR,<br>Cisco Webex Room 70 G2 Dual NR,<br>Cisco Webex Room 70d,<br>Cisco Webex Room 70s Endpoints | Env 1, 2, 3 | RoomOS 11.1.2.4 | See note 19. |
| Video Teleconference | Cisco Webex Room Kit,<br>Cisco Webex Room Kit NR,<br>**Cisco Webex Room Kit Mini**,<br>Cisco Webex Room Kit Mini NR,<br>Cisco Webex Room Kit Plus,<br>Cisco Webex Room Kit Plus NR,<br>Cisco Webex Room Kit Pro,<br>Cisco Webex Room Kit Pro NR Endpoints | Env 1, 2, 3 | RoomOS 11.1.2.4 | See note 19. |
| Video Teleconference | Cisco Webex Board 55,<br>Cisco Webex Board 55S,<br>Cisco Webex Board 70,<br>Cisco Webex Board 70S, and<br>Cisco Webex Board 85S Endpoints | Env 1, 2, 3 | RoomOS 11.1.2.4 | See note 19. |
| Video Teleconference | **Cisco Webex Desk Pro**,<br>Cisco Webex Desk Pro NR Endpoints | Env 1, 2, 3 | RoomOS 11.1.2.4 | See note 20. |
| Video Teleconference | Cisco Webex Desk,<br>Cisco Webex Desk NR | Env 1, 2, 3 | RoomOS 11.1.2.4 | See note 20. |
| Video Teleconference | Cisco Webex Room Panorama,<br>Cisco Webex Room Panorama NR,<br>Cisco Webex Room 70 Panorama, and<br>Cisco Webex Room 70 Panorama NR Endpoints | Env 1, 2, 3 | RoomOS 10.19.2.2 | See note 19. |
| Video Teleconference | Cisco Webex Room 70S NR and<br>Cisco Webex Room 70D NR Endpoints | Env 1, 2, 3 | RoomOS 11.1.2.4 | See note 19. |
| Video Teleconference | Cisco Webex Desk Mini,<br>Cisco Webex Desk Mini NR,<br>Cisco Webex Desk Hub,<br>Cisco Webex Board Pro 55,<br>Cisco Webex Board Pro 55 NR,<br>Cisco Webex Board Pro 75, and<br>Cisco Webex Board Pro 75 NR Endpoints | Env 1, 2, 3 | RoomOS 11.1.2.4 | See note 21. |
| Video Teleconference | Cisco Webex Room Bar<br>Cisco Webex Room Bar NR Endpoints | Env 1, 2, 3 | RoomOS 11.1.2.4 | See note 22. |
| Video Teleconference | Cisco Room Kit EQ<br>Cisco Room Kit EQ NR | Env 1, 2, 3 | RoomOS 11.1.2.4 | See note 23. |
| Soft Client | CMS (WebRTC) | HE, Env 1 | 3.6 | See note 24. |
| Analog PSTN mode DSCD | **GD vIPer** (See note 25.) | Env 1, 2, 3 | 6.1.2.1/6.1.2.2 | Site-Provided |
| SCCP and SIP modes DSCD | **GD IP vIPer** (See note 25.) | Env 1, 2, 3 | 6.1.2.1/6.1.2.2 | Site-Provided |

**NOTE(S):**
1. 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.
2. 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.

(Table continues next page.)

## Table 4. DoDIN APL Product Summary (continued)

**NOTE(S):** (continued)
3. 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, which also updated noted SIP end points to the appropriate sip(x) load version, and the VMware vSphere hypervisor ESXi 7.0.2 version was added for applicable SUT components.
4. 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)
5. 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).
6. 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.
7. With DTR 23, the CER software version was updated from 14.0.1.10000-7 to 14 SU2.
8. 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.
9. 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.
10. 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.
11. 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.
12. 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 Media Gateway 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.
13. 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.
14. 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.
15. 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.
16. 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]).

(Table continues next page.)

## Table 4. DoDIN APL Product Summary (continued)

**NOTE(S):** (continued)

17. With DTR 37, the sip(x) end instrument software versions were updated from 14-1-1-0001-125 to 14-2-1-0001-14 as a result of the DTR 37 software version update on the UCM and SME from 14.0.1.13033-2 to 14.0.1.14890-65.
18. 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.
19. 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 Webex Room Panorama, Cisco Webex Room Panorama NR, Cisco Webex Room 70 Panorama, and Cisco Webex Room 70 Panorama NR.
20. With DTR 10, the Cisco Webex Desk and Cisco Webex Desk NR endpoints were added to the currently certified family of Webex 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 Webex Room Panorama, Cisco Webex Room Panorama NR, Cisco Webex Room 70 Panorama, and Cisco Webex Room 70 Panorama NR.
21. With DTR 18, the Webex Desk Mini, Webex Desk Mini NR, Webex Desk Hub, Webex Board Pro 55, Webex Board Pro 55 NR, Webex Board Pro 75, and Webex Board Pro 75 NR endpoints were added to the currently certified family of Webex 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 Webex Room Panorama, Cisco Webex Room Panorama NR, Cisco Webex Room 70 Panorama, and Cisco Webex Room 70 Panorama NR.
22. With DTR 25, the Webex Room Bar and Cisco Webex Room Bar NR endpoints were added to the currently certified family of Webex 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 Webex Room Panorama, Cisco Webex Room Panorama NR, Cisco Webex Room 70 Panorama, and Cisco Webex Room 70 Panorama NR.
23. 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).
24. 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.
25. 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.

**LEGEND:**

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

**4. Test Details.** This extension of the certification is based on DTRs 37 and 42. 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 37 was requested to update the Cisco UCM and SME software versions from 14.0.1.13033-2 to 14.0.1.14890-65, which also updated any noted SIP end point to the appropriate sip(x) load version, and to add the VMware vSphere hypervisor ESXi 7.0.2 version for applicable SUT components.

DTR 42 was requested to update the Cisco 8875 and 8875 NR voice and video IP phones software version from PHONEOS-8875.2-0-1-0001-16 to PHONEOS-8875.2-1-1-0001-11. Note: PHONEOS is certified as a Routine Only End Instrument (ROEI).

JITC analysis determined IO testing with CS vulnerability scans was required to validate the software updates did not change the certified IO features or approved CS posture of the SUT. Furthermore, there were no past due CS or IO Vendor Plan of Action and Milestones (POA&Ms).

JITC conducted multi-vendor IO testing from 12 June to 16 June 2023, using test procedures derived from References (i) and (j). Testing included call hold, call transfers (attended and unattended), and voice/video duration calls between the SUT and the Session Controllers, Multifunction Switch, and their respective IP and analog end instruments depicted in Table 5.

**Table 5. Multi-vendor ESCs/LSCs with Voice/Video EIs Used for IO Testing**

| Multi-vendor ESC/LSC/MFS Voice EIs | | | |
|---|---|---|---|
| **ESC/LSC** | **Version** | **EI** | **Version** |
| Avaya CS2100 (MFS) | SE09.1 | Analog/PSTN | NA |
| Avaya Aura (LSC) | 10.1 | Unified IP Phone 9608, 96x1, 96x0 | 7.1.15.0.14 |
| | | Unified IP Phone J139/J169/J179 | 4.0.13.06 |
| | | Analog | NA |
| CISCO ESC21 (ESC) | 14.0.1 | Unified IP Phone 8811, 8845 | sip8845_65.14-0-1-001-12 |
| | | Analog/PSTN | NA |
| NEC UNIVERGE 3C (LSC) | 9.2.1.7 | Analog/PSTN | NA |

(Table continues next page.)

**Table 5. Multi-vendor ESCs/LSCs with Voice/Video EIs Used for IO Testing** (continued)

| **Multi-vendor ESC/LSC/MFS Voice EIs** (continued) | | | |
|---|---|---|---|
| **ESC/LSC** | **Version** | **EI** | **Version** |
| REDCOM HDX (LSC) | v4.0AR5P8 | Teo AS-SIP EI | xx.04.45 |
| | | Analog/PSTN | NA |
| | | Plantronics VVX 501, VVX 601 (Voice/Video) | 6.4.1.2280 |
| | | Plantronics Trio 8800 with Trio Vison+ (Voice/Video) | 7.0.1.1086 |
| REDCOM SLICE (LSC) | v4.0AR5P8 | Teo AS-SIP EI | xx.04.45 |
| | | Plantronics VVX 501, VVX 601 (Voice/Video) | 6.4.1.2280 |
| | | Analog/PSTN | NA |
| Ribbon Communications Federal Inc. Ribbon Application Server | 15.1 | Teo 7810 | 05.04.45 |
| | | Plantronics Trio 8800 with Trio Vison+ (Voice/Video) | 7.0.1.1086 |
| | | Plantronics VVX 501, VVX 601 (Voice/Video) | 6.4.1.2280 |
| | | Analog/PSTN | NA |

**LEGEND:**

| | | | |
|---|---|---|---|
| AS-SIP | Assured Services Session Initiation Protocol | MFS | Multifunction Switch |
| CS | Communication Server | NA | Not Applicable |
| EI | End Instrument | PSTN | Public Switched Telephone Network |
| ESC | Enterprise Session Controller | SE | Software Edition |
| HDX | High Density Exchange | sip | Session Initiation Protocol |
| Inc | Incorporated | v | version |
| IO | Interoperability | V&V | Voice and Video |
| IP | Internet Protocol | VVX | Voice and Video eXchange |
| LSC | Local Session Controller | | |

IO testing demonstrated the SUT meets current ESC/LSC requirements with the updated software in accordance with Reference (b) with no new IO test discrepancies. In addition, the Cisco UCM and Cisco SME software version update to 14.0.1.14890-65 with DTR 37 also updated noted SIP end points to the appropriate sip(x) load version and the VMware vSphere hypervisor ESXi 7.0.2 version was added for applicable SUT components, as noted in Table 4.

Based on analysis, the IO test results, and no past due IO Vendor POA&Ms, JITC approves DTRs 37 and 42.

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

Enclosure 2 provides a list of errata changes to this extension since the original signature date.

**5. Additional Information.** JITC distributes interoperability information via the JITC Electronic Report Distribution (ERD) 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.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.ie.list.approved-products-certification-office@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 14

**6. Point of Contact (POC).** JITC POC: Ms. Elaine Macari, commercial telephone (520) 538 5483, DSN telephone 879-5483, FAX DSN 879-4347; e-mail address: elaine.s.macari.civ@mail.mil; mailing address: Joint Interoperability Test Command, ATTN: JTE2 (Ms. Elaine Macari), P.O. Box 12798, Fort Huachuca, AZ 85670-2798. The APCO tracking number for the SUT is 2104001.

FOR THE COMMANDER:

DORN.LAWRENCE.T.1168371930 Digitally signed by DORN.LAWRENCE.T.1168371930 Date: 2023.07.27 14:09:13 -07'00'

2 Enclosures a/s

LAWRENCE T. DORN
Chief
Specialized Test Division

**Distribution (electronic mail):**
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ISG Secretariat, DISA, JT
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US Coast Guard, CG-64
DISA/ISG REP
OUSD Intel, IS&A/Enterprise Programs of Record
DLA, Test Directorate, J621C
NSA/DT
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 14, Tracking Number (TN) 2104001," July 2023
(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 1.0 for Unified Capabilities Requirements (UCR) 2013 Change 2," March 2022 (Draft)
(j) JITC, "Enterprise Session Controller (ESC) Test Procedures Version 1.0 for Unified Capabilities Requirements (UCR) 2013 Change 2," March 2022 (Draft)

# Table 4-1. Joint Interoperability Certification Revision History

| Revision | Date | Approved By | Comments |
|---|---|---|---|
| N/A | 14 July 2023 | Lawrence Dorn | Original Extension of the Joint Interoperability Certification for DTRs 37 and 42. |
| 1 | 27 July 2023 | Lawrence Dorn | Amended the original certification memorandum for DTRs 37 and 42 per the Vendor's request to revise DTR 37 to add the VMware vSphere hypervisor ESXi 7.0.2 version for applicable SUT components. The memo was updated as follows:<br>• Paragraph **2. Conditions of Certification** and Paragraph **4. Test Details**: DTR 37 request verbiage updated to include addition of the VMware vSphere hypervisor ESXi 7.0.2 version for applicable SUT components.<br>• **Table 4. DoDIN APL Product Summary** (body): Added the VMware vSphere hypervisor "ESXi 7.0.2" version for the following SUT components:<br>▪ Cisco Unified Communications Manager (UCM)<br>▪ Cisco Session Management Edition (SME)<br>▪ Instant Messaging & Presence Server<br>▪ Cisco Unity Connection<br>▪ Cisco Meeting Server (CMS)<br>▪ Cisco Emergency Responder (CER)<br>▪ Cisco Unified Contact Center Express (UCCX)<br>▪ Interworking Gateway (IWG) on Cisco Cloud Services Router (CSR) 1000v<br>▪ IWG on C8000v series router<br>▪ Session Border Controller (SBC) on CSR 1000v<br>▪ SBC on C8000v series router<br>▪ IWG/SBC on CSR 1000v<br>▪ IWG/SBC on C8000v series router<br>• **Table 4. DoDIN APL Product Summary** (notes): Note 3 revised to include addition of the VMware vSphere hypervisor ESXi 7.0.2 version for applicable SUT components. |

**LEGEND:**

| | | | |
|---|---|---|---|
| APL | Approved Products List | N/A | Not Applicable |
| CER | Cisco Emergency Responder | SBC | Session Border Controller |
| CMS | Cisco Meeting Server | SME | Session Management Edition |
| CSR | Cloud Services Router | SUT | System Under Test |
| DoDIN | Department of Defense Information Network | UCM | Unified Communications Manager |
| DTR | Desktop Review | UCCX | Unified Contact Center Express |
| ESXi | Elastic Sky X integrated | v | virtual |
| IWG | Interworking Gateway | VM | Virtual Machine |