



DEFENSE INFORMATION SYSTEMS AGENCY

P. O. BOX 549
FORT MEADE, MARYLAND 20755-0549

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

3 July 2024

MEMORANDUM FOR DISTRIBUTION

SUBJECT: Extension of the Joint Interoperability Certification of Aruba, a Hewlett Packard Enterprise company, CX Switches (6000 Series) with Software Release Aruba Operating System (ArubaOS)-CX 10.13

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, Change 2," September 2017
(c) through (f), see Enclosure

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

2. Conditions of Certification. The Aruba, a Hewlett Packard Enterprise company, CX Switches (6000 Series) with Software Release Aruba Operating System (ArubaOS)-CX 10.13 is hereinafter referred to as the System Under Test (SUT). The SUT meets the critical requirements of the Unified Capabilities Requirements (UCR), Reference (b), as an Assured Services Local Area Network (ASLAN) Core, Distribution, and Access switch and is certified for joint use with the conditions described 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 Review (DTR) 5. DTR 5 was requested to update the Stock Keeping Unit (SKU) on the following CX 6300 Series switch models currently listed on the APL to ensure DoD customers order the appropriate switch:

| | |
|-------------------------------|-------------------------------|
| JL658A replaced by SKU S0G03A | JL664A replaced by SKU S0G01A |
| JL659A replaced by SKU S0G04A | JL665A replaced by SKU S0G95A |
| JL660A replaced by SKU S0G05A | JL666A replaced by SKU S0G96A |
| JL661A replaced by SKU S0G06A | JL667A replaced by SKU S0G97A |
| JL662A replaced by SKU S0F99A | JL668A replaced by SKU S0G98A |
| JL663A replaced by SKU S0G00A | JL762A replaced by SKU S0G02A |

The new SKUs are Trade Agreement Act (TAA)-compliant, and there were no changes to the switches or software with this update.

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See Table 4B for an updated list of certified SUT components/SKUs and Paragraph 4 for additional details.

Table 1. Conditions

| Description | | Operational Impact | Remarks |
|--|---|---|---|
| UCR Waivers | | | |
| None | | | |
| TDR# | Conditions of Fielding | | |
| ANI-0770-005 | EDG-000080(a): Switch model JL659A Autonegotiation mode – does not support Half Duplex. CoF: Both ends need to be set for full duplex. | Minor with CoF | On 16 March 2021, DISA adjudicated this discrepancy as minor with CoF. |
| ANI-0770-006 | EDG-000080(b): Switch model JL659A Speed Forced mode - Smart Rate does not allow for a hard-set port speed. CoF: Remote end needs to be set to desired rate. | Minor with CoF | On 16 March 2021, DISA adjudicated this discrepancy as minor with CoF. |
| TDR# | Open Test Discrepancies | | |
| ANI-0770-001 | EDG-000010: On the CX 6300 Series switch model JL659A only, lab limitations prevented full line rate testing per IO-17. | Information Only | On 20 April 2021, DISA adjudicated this discrepancy as Information Only. |
| ANI-0770-002 | EDG-000010: CX 6400 R0X44A Line Card Module – only 46 of 48 available interfaces tested on the CX 6400 ROX44A linecard. | Information Only | On 20 April 2021, DISA adjudicated this discrepancy as Information Only. |
| ANI-0770-003 | EDG-000020: CX 6300 Series switch - 50 Gigabit Port Interface Rate not supported as an uplink speed. | CLOSED (See note 1.) | On 16 March 2021, DISA adjudicated this discrepancy as minor with Vendor POA&M. With DTR 1, on 22 February 2022 DISA re-adjudicated this discrepancy as minor with updated Vendor POA&M. |
| ANI-0770-004 | EDG-000020: CX 6400 Series switch - 50 Gigabit Port Interface Rate not supported as an uplink speed. | CLOSED (See note 1.) | On 16 March 2021, DISA adjudicated this discrepancy as minor with Vendor POA&M. With DTR 1, on 22 February 2022 DISA re-adjudicated this discrepancy as minor with updated Vendor POA&M. |
| ANI-0770-007 | EDG-000020(f): Ethernet Linecard/Blade failover - the R0X45A 100G linecard did not achieve Voice and Video failover times of 5 seconds or less. | CLOSED (See note 2.) | On 1 September 2023, this TDR was closed based on DTR 3 testing. |
| ANI-0770-008 | EDG-000130: Partial Comply with RFC 2597 Assured Forwarding (AF) Per-Hop Behavior (PHB) Group, ECN. | CLOSED (See note 1.) | On 20 April 2021, DISA adjudicated this discrepancy as minor with vendor POA&M. With DTR 1, on 22 February 2022 DISA re-adjudicated this discrepancy as minor with updated Vendor POA&M. |
| ANI-0770-009 | EDG-000130: Non-Comply with RFC 4502 Remote Monitoring Management Information Base (MIB) Version 2. | None UCR Change Requirement (See note 3.) | On 16 March 2021, DISA adjudicated this discrepancy as minor with vendor POA&M. With DTR 1, on 22 February 2022 DISA re-adjudicated this discrepancy as minor with updated Vendor POA&M. |
| NOTE(S): | | | |
| <p>1. TDRs ANI-0770-003, -004, -008, and -011: With DTR 2, these TDRs were closed based on an updated Vendor LoC stating compliance to the EDG 000020, EDG-000130 (RFC 2597), and IP6-000960L (RFC 4087) requirements with the ArubaOS-CX 10.11 software version.</p> <p>2. TDR ANI-0770-007: With DTR 1, on 22 February 2022 DISA re-adjudicated this discrepancy as Critical with updated Vendor POA&M. Due to this critical TDR for the R0X45A 100G module offered on the CX 6400 switch; the SUT is not certified for 100G. With DTR 2, the Vendor provided an updated LoC stating full compliance for 100G failover; however, JITC analysis determined IO testing was required to validate resolution of this discrepancy. With DTR 3, this TDR was closed based on testing conducted by JITC 21 August - 1 September 2023; with the Aruba-CX 10.11 Software Release the SUT successfully met EDG-000020(f) requirements.</p> | | | |

(Table continues next page.)

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Table 1. Conditions (continued)

| | | | | | |
|---|------------------------------------|-------|-------------------------------------|--|--|
| NOTE(S): (continued) | | | | | |
| 3. TDR ANI-0770-009: With DTR 2, on 21 February 2023, DISA re-adjudicated this discrepancy as a UCR Change Requirement based on the adjudication of Cisco TDR CIS-0769-002 under TN 2007801 to change RFC 4502 to an optional capability. | | | | | |
| LEGEND: | | | | | |
| AF | Assured Forwarding | IP6 | IP version 6 | | |
| ANI | Arista Networks, Inc. | JITC | Joint Interoperability Test Command | | |
| CIS | Cisco | LoC | Letter of Compliance | | |
| CoF | Condition of Fielding | MIB | Management Information Base | | |
| DISA | Defense Information Systems Agency | PHB | Per-Hop Behavior | | |
| DTR | Desktop Review | POA&M | Plan of Action and Milestones | | |
| ECN | Explicit Congestion Notification | RFC | Request for Comment | | |
| EDG | Edge | SUT | System Under Test | | |
| G | Gigabit | TDR | Test Discrepancy Report | | |
| IAW | In Accordance With | TN | Tracking Number | | |
| IO | Interoperability | UCR | Unified Capabilities Requirements | | |
| IP | Internet Protocol | | | | |

3. Interoperability Status. Table 2 provides the SUT interface interoperability status, Table 3 provides the Capability Requirements and Functional Requirements status, and Tables 4A-4C provide a DoDIN APL Product Summary by series, to include subsequent DTR updates.

Table 2. Interface Status

| Interface (See note 1.) | Applicability | | | Status | Remarks |
|--|---------------|---|---|---------------|-------------|
| | Co | D | A | | |
| Network Management Interfaces | | | | | |
| IEEE 802.3i (10BaseT UTP) | C | C | C | Met | |
| IEEE 802.3u (100BaseT UTP) | C | C | C | Met | |
| IEEE 802.3u (100BaseFX) | O | O | O | Not Tested | See note 2. |
| IEEE 802.3ab (1000BaseT UTP) | C | C | C | Met | |
| IEEE 802.3z (1000BaseX Fiber) | O | O | O | Not Tested | See note 2. |
| Access (User) Interfaces (See note 3.) | | | | | |
| IEEE 802.3i (10BaseT UTP) | C | C | C | Partially Met | See note 4. |
| IEEE 802.3u (100BaseT UTP) | C | C | C | Met | |
| IEEE 802.3u (100BaseFX) | C | C | C | Not Tested | See note 2. |
| IEEE 802.3ab (1000BaseT UTP) | C | C | C | Met | |
| IEEE 802.3z (1000BaseX Fiber) | C | C | C | Met | |
| IEEE 802.3bz (2.5/5GBaseX) | O | O | O | Met | |
| IEEE 802.3ae (10GBaseX) | C | C | C | Met | |
| IEEE 802.3by (25GBaseX) | O | O | O | Met | |
| IEEE 802.3ba (40GBaseX) | O | O | O | Met | |
| IEEE 802.3cd (50GBaseX) | O | O | O | Not Tested | See note 5. |
| IEEE 802.3ba (100GBaseX) | O | O | O | Met | See note 6. |
| IEEE 802.3bs (400GBaseX) | O | O | O | Not Tested | See note 2. |
| Uplink (Trunk) Interfaces (See note 3.) | | | | | |
| IEEE 802.3u (100BaseT UTP) | O | O | O | Met | |
| IEEE 802.3u (100BaseFX) | O | O | O | Not Tested | See note 2. |
| IEEE 802.3ab (1000BaseT UTP) | C | C | C | Met | |
| IEEE 802.3z (1000BaseX Fiber) | C | C | C | Met | |
| IEEE 802.3bz (2.5/5GBaseX) | O | O | O | Met | |

(Table continues next page.)

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Table 2. Interface Status (continued)

| Interface (See note 1.) | Applicability | | | Status | Remarks |
|---|---|--------|---|------------|-------------|
| | Co | D | A | | |
| Uplink (Trunk) Interfaces (See note 3.) (continued) | | | | | |
| IEEE 802.3ae (10GBaseX) | C | C | C | Met | |
| IEEE 802.3by (25GBaseX) | O | O | O | Met | |
| IEEE 802.3ba (40GBaseX) | O | O | O | Met | |
| IEEE 802.3cd (50GBaseX) | O | O | O | Not Tested | See note 5. |
| IEEE 802.3ba (100GBaseX) | O | O | O | Met | See note 6. |
| IEEE 802.3bs (400GBaseX) | O | O | O | Not Tested | See note 2. |
| NOTE(S): | | | | | |
| 1. Table 3 depicts the SUT high-level requirements. Table 3-2 of Enclosure 3 in Reference (c) provides a detailed list of requirements. | | | | | |
| 2. The SUT does not support this (conditional or optional) interface. | | | | | |
| 3. Core, Distribution, and Access products must minimally support one of the interfaces listed in this table as conditional for the given role. Other rates and standards may be provided as optional interfaces. | | | | | |
| 4. IEEE 802.3i (10BaseT UTP) is not supported on HPE Smart Rate port switch models JL659A and JL660A. See Table 1 for Conditions and Table 3-3 of Enclosure 3 in Reference (c), for a list of individual components and descriptions. | | | | | |
| 5. Per Vendor's CX 6300 and CX 6400 datasheets, 50 GbE transceiver capability will be available in a future software release. | | | | | |
| 6. With DTR 3, the SUT status for failover requirements changed from "Partially Met" to "Met" with resolution of TDR ANI-0770-007. See Table 1 for additional information. | | | | | |
| LEGEND: | | | | | |
| 802.3ab | 1000BaseT Gbps Ethernet over Twisted Pair | C | Conditional | | |
| 802.3ae | 10 Gbps Ethernet over Fiber | Co | Core | | |
| 802.3an | 10 Gbps Ethernet over twisted pair | D | Distribution | | |
| 802.3ba | 40 and 100 Gigabit Ethernet over Twisted pair and Fiber | DTR | Desktop Review | | |
| 802.3by | 25 Gbps Ethernet over Multi-Mode Fiber | GBaseX | Gigabit Ethernet over Fiber or Copper | | |
| 802.3bz | 2.5/5 Gbps Ethernet over balanced Twisted Pair | GbE | Gigabit Ethernet | | |
| 802.3cd | 50 Gbps Ethernet over Multi-Mode Fiber | Gbps | Gigabits per second | | |
| 802.3i | 10BaseT 10 Mbps Ethernet over Twisted Pair | HPE | Hewlett Packard Enterprise | | |
| 802.3j | 10BaseF Mbps over fiber | IEEE | Institute of Electrical and Electronics Engineers | | |
| 802.3u | Fast Ethernet at 100 Mbps, copper and Fiber | Mbps | Megabits Per Second | | |
| 802.3z | Gigabit Ethernet over Fiber | O | Optional | | |
| A | Access | SUT | System Under Test | | |
| BaseFX | Megabit Ethernet over Fiber | TDR | Test Discrepancy Report | | |
| BaseT | Megabit (Baseband Operation, Twisted Pair) Ethernet | UTP | Unshielded Twisted Pair | | |
| BaseX | Megabit Ethernet over Fiber or Copper | VSX | Virtual Switching Extension | | |

Table 3. Capability Requirements and Functional Requirements Status

| CR/FR ID | UCR Requirement (See note 1.) | UCR 2013 Change 2 Reference | Status |
|--|--|-----------------------------------|---------------------------------------|
| 1 | General LAN Switch and Router Product Requirements (R) | 7.2.1 | Partially Met (See notes 2 and 3.) |
| 2 | LAN Switch and Router Redundancy Requirements (R) | 7.2.2 | Met |
| 3 | LAN Product Requirements Summary (R) | 7.2.3 | Partially Met (See note 3.) |
| 4 | Multiprotocol Label Switching (O) | 7.2.4 | Not Tested (See note 4.) |
| 5 | Internet Protocol version 6 (R) | 5.2 | Met |
| NOTE(S): | | | |
| 1. The annotation of "required" refers to a high-level requirement category. Enclosure 3 of Reference (c) addresses the applicability of each sub-requirement. | | | |
| 2. A USAISEC-TIC-led Cybersecurity test team conducted Security testing and published the results in a separate report, Reference (d). | | | |
| 3. Reference Table 1 for limitations, conditions, and unsupported protocols. | | | |
| 4. The SUT does not support this optional requirement. | | | |

(Table continues next page.)

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

| LEGEND: | | | |
|----------------|------------------------|---------|---|
| CR | Capability Requirement | R | Required |
| FR | Functional Requirement | SUT | System Under Test |
| ID | Identification | TIC | Technology Integration Center |
| LAN | Local Area Network | UCR | Unified Capabilities Requirements |
| O | Optional | USAISEC | U.S. Army Information Systems Engineering Command |

Table 4A. Aruba CX 6200 Series DoDIN APL Product Summary

| Product Identification | | | |
|--|---|-------------------------------------|---|
| Product Name | Aruba CX Switches (6000 Series) | | |
| Software Release | ArubaOS-CX 10.13 (See note 1.) | | |
| UCR Product Type(s) | ASLAN Access Switch (Layer 2 only) | | |
| Product Description | The CX 6200 Series Switch delivers voice-class availability, 1/10 GbE SFP+ and 10/100/1000BASE-T for switching VoIP, video, and data traffic. | | |
| DoDIN Certified Function | Component/Sub-component Name (See notes 2, 3, 4, 5, and 6.) | Tested Version (See note 1.) | Remarks |
| Aruba CX 6200F ASLAN Access - Layer 2 only | R8V13A S0G13A S0G14A S0G15A S0G16A S0G17A S0M86A S0M87A S0M88A S0M89A S0M90A | ArubaOS-CX 10.13.1000 | Stackable Switch |
| Aruba CX 6200M ASLAN Access - Layer 2 only | R8V08A R8V09A R8V10A R8V11A R8V12A | ArubaOS-CX 10.13.1000 | Stackable Switch |
| NOTE(S): | | | |
| <p>1. The SUT was initially certified with Software Release ArubaOS-CX 10.06. Subsequent DTRs updated the ArubaOS-CX Software Release version as follows: DTR 1 - from 10.06 to 10.09; DTR 2 - from 10.09 to 10.11; DTR 4 - from 10.11 to 10.13.</p> <p>2. Table 3-3a of Enclosure 3 in Reference (c) provides the detailed descriptions on the initially tested components and subcomponents.</p> <p>3. Components bolded and underlined were tested by USAISEC-TIC. The other components in the family series were not tested; however, JITC certified the other components for joint use because they utilize the same software and similar hardware as tested and certified components and JITC analysis determined they were functionally identical for interoperability certification purposes.</p> <p>4. With DTR 4, the CX 6200 JL724A, JL725A, JL726A, JL727A, and JL728A switch models were removed due to product expiration.</p> <p>5. With DTR 4, the following Aruba CX 6200F switch models were added based on analysis (no testing) and similarity to the previously tested and certified CX 6200 JL26A switch model, which was removed via DTR 4 due to product expiration: R8V13A, S0G13A, S0G14A, S0G15A, S0G16A, S0G17A, S0M86A, S0M87A, S0M88A, S0M89A, S0M90A.</p> <p>6. With DTR 4, the Aruba CX 6200M switch models were added based on analysis (no testing) and similarity to the previously tested and certified CX 6200 JL26A switch model, which was removed via DTR 4 due to product expiration.</p> | | | |
| LEGEND: | | | |
| ArubaOS | Aruba Operating System | SFP | Small Form-factor Pluggable |
| APL | Approved Products List | SFP+ | Small Form-factor Pluggable Plus |
| ASLAN | Assured Services Local Area Network | SUT | System Under Test |
| BASE-T | Baseband Operation, Twisted Pair Ethernet | TAA | Trade Agreement Act |
| DoDIN | Department of Defense Information Network | TIC | Technology Integration Center |
| DTR | Desktop Review | UCR | Unified Capabilities Requirements |
| G | Gigabit | USAISEC | U.S. Army Information Systems Engineering Command |
| GbE | Gigabit Ethernet | VoIP | Voice over Internet Protocol |
| JITC | Joint Interoperability Test Command | W | Watt |
| PoE | Power over Ethernet | | |

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Table 4B. Aruba CX 6300 Series DoDIN APL Product Summary

| Product Identification | | | | | | | | | | | | | | | |
|--|--|--|---|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Product Name | Aruba CX Switches (6000 Series) | | | | | | | | | | | | | | |
| Software Release | ArubaOS-CX 10.13 (See note 1.) | | | | | | | | | | | | | | |
| UCR Product Type(s) | ASLAN Core/Distribution/Access Switch | | | | | | | | | | | | | | |
| Product Description | The CX 6300 Series Switch delivers voice-class availability, 1/10/25 GbE SFP56, 10/100/1000/BASE-T and 2.5/5GBASE-T for switching VoIP, video, and data traffic. (See note 2.) | | | | | | | | | | | | | | |
| DoDIN Certified Function | Component/Sub-component Name (See notes 3, 4, 5, and 6.) | Tested Version (See note 1.) | Remarks | | | | | | | | | | | | |
| Aruba CX 6300 ASLAN Core/Distribution/Access | <u>S0G03A</u> <u>S0G04A</u> S0G05A <u>S0G06A</u> S0F99A S0G00A S0G01A S0G95A S0G96A S0G97A S0G98A S0G02A | ArubaOS-CX 10.13.1000 | Redundant power modules Stackable Switch | | | | | | | | | | | | |
| Aruba CX 6300M ASLAN Core/Distribution/Access | R8S89A R8S90A R8S91A R8S92A S0X44A | ArubaOS-CX 10.13.1000 | Redundant power modules Stackable Switch | | | | | | | | | | | | |
| NOTE(S): | | | | | | | | | | | | | | | |
| <p>1. The SUT was initially certified with Software Release ArubaOS-CX 10.06. Subsequent DTRs updated the ArubaOS-CX Software Release version as follows: DTR 1 from 10.06 to 10.09; DTR 2 from 10.09 to 10.11; DTR 4 from 10.11 to 10.13.</p> <p>2. Per Vendor's CX 6300 datasheet, 50 GbE transceiver capability will be available in a future software release.</p> <p>3. Table 3-3B of Enclosure 3 in Reference (c) provides the detailed descriptions on the initially tested components and subcomponents.</p> <p>4. Components bolded and underlined were tested by USAISEC-TIC. The other components in the family series were not tested; however, JITC certified the other components for joint use because they utilize the same software and similar hardware as tested and certified components and JITC analysis determined they were functionally identical for interoperability certification purposes.</p> <p>5. With DTR 4, the Aruba CX 6300M switches were added based on analysis (no testing) and similarity to the previously tested and certified CX 6300 Series JL658A, JL659A, and JL661A switch models.</p> <p>6. With DTR 5, the SKUs for the CX 6300 Series switch models listed below were updated to ensure DoD customers order the appropriate switch. The new SKUs are TAA-compliant, and there were no changes to the switches or software with this update.</p> <table border="0"> <tr> <td>JL658A replaced by SKU S0G03A</td> <td>JL662A replaced by SKU S0F99A</td> <td>JL666A replaced by SKU S0G96A</td> </tr> <tr> <td>JL659A replaced by SKU S0G04A</td> <td>JL663A replaced by SKU S0G00A</td> <td>JL667A replaced by SKU S0G97A</td> </tr> <tr> <td>JL660A replaced by SKU S0G05A</td> <td>JL664A replaced by SKU S0G01A</td> <td>JL668A replaced by SKU S0G98A</td> </tr> <tr> <td>JL661A replaced by SKU S0G06A</td> <td>JL665A replaced by SKU S0G95A</td> <td>JL762A replaced by SKU S0G02A</td> </tr> </table> | | | | JL658A replaced by SKU S0G03A | JL662A replaced by SKU S0F99A | JL666A replaced by SKU S0G96A | JL659A replaced by SKU S0G04A | JL663A replaced by SKU S0G00A | JL667A replaced by SKU S0G97A | JL660A replaced by SKU S0G05A | JL664A replaced by SKU S0G01A | JL668A replaced by SKU S0G98A | JL661A replaced by SKU S0G06A | JL665A replaced by SKU S0G95A | JL762A replaced by SKU S0G02A |
| JL658A replaced by SKU S0G03A | JL662A replaced by SKU S0F99A | JL666A replaced by SKU S0G96A | | | | | | | | | | | | | |
| JL659A replaced by SKU S0G04A | JL663A replaced by SKU S0G00A | JL667A replaced by SKU S0G97A | | | | | | | | | | | | | |
| JL660A replaced by SKU S0G05A | JL664A replaced by SKU S0G01A | JL668A replaced by SKU S0G98A | | | | | | | | | | | | | |
| JL661A replaced by SKU S0G06A | JL665A replaced by SKU S0G95A | JL762A replaced by SKU S0G02A | | | | | | | | | | | | | |
| LEGEND: | | | | | | | | | | | | | | | |
| ArubaOS | Aruba Operating System | MACsec | Media Access Control Security | | | | | | | | | | | | |
| APL | Approved Products List | PoE | Power over Ethernet | | | | | | | | | | | | |
| ASLAN | Assured Services Local Area Network | PTP | Precision Time Protocol | | | | | | | | | | | | |
| AVB | Audio Video Bridging | SKU | Stock Keeping Unit | | | | | | | | | | | | |
| BASE-T | Baseband Operation, Twisted Pair Ethernet | SUT | System Under Test | | | | | | | | | | | | |
| DoD | Department of Defense | SFP+ | Small Form-factor Pluggable Plus | | | | | | | | | | | | |
| DoDIN | Department of Defense Information Network | TAA | Trade Agreement Act | | | | | | | | | | | | |
| DTR | Desktop Review | TIC | Technology Integration Center | | | | | | | | | | | | |
| G | Gigabit | UCR | Unified Capabilities Requirements | | | | | | | | | | | | |
| GBASE-T | Gigabit Baseband Operation, Twisted Pair Ethernet | URL | Uniform Resource Locator | | | | | | | | | | | | |
| GBase-X | Gigabit Ethernet over Fiber or Copper | USAISEC | U.S. Army Information Systems Engineering Command | | | | | | | | | | | | |
| GbE | Gigabit Ethernet | VoIP | Voice over Internet Protocol | | | | | | | | | | | | |
| JITC | Joint Interoperability Test Command | VSX | Virtual Switching Extension | | | | | | | | | | | | |
| LRM | License Reporting Manager | | | | | | | | | | | | | | |

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Table 4C. Aruba CX 6400 Series DoDIN APL Product Summary

| Product Identification | | | |
|---|--|--|---|
| Product Name | Aruba CX Switches (6000 Series) | | |
| Software Release | ArubaOS-CX 10.13 (See note 1.) | | |
| UCR Product Type(s) | ASLAN Core/Distribution/Access Switch | | |
| Product Description | The CX 6400 Series Switch delivers voice-class availability, 1/10/25/40/100 GbE SFP56, 10/100/1000/BASE-T for switching VoIP, video, and data traffic. (See note 2.) | | |
| DoDIN Certified Function | Component/Sub-component Name (See notes 3, 4, 5, and 6.) | Tested Version (See note 1.) | Remarks |
| Aruba CX 6400 ASLAN Core/Distribution/Access | <u>R0X24C/R0X26C</u> R0X25C/R0X27C R0X31A <u>R0X38C</u> <u>R0X39C</u> R0X40C R0X41C R0X42C <u>R0X43C</u> <u>R0X44C</u> | ArubaOS-CX 10.13.1000 | Redundant Power Modules Redundant Supervisor Modules |
| NOTE(S): | | | |
| <p>1. The SUT was initially certified with Software Release ArubaOS-CX 10.06. Subsequent DTRs updated the ArubaOS-CX Software Release version as follows: DTR 1 - from 10.06 to 10.09; DTR 2 - from 10.09 to 10.11; DTR 4 - from 10.11 to 10.13.</p> <p>2. Per Vendor’s CX 6400 datasheet, 50 GbE transceiver capability will be available in a future software release. With DTR 3, the 6400 100GbE blade failover discrepancy was resolved based on JITC testing from 21 August to 1 September 2023 with the ArubaOS CX 10.11 Software Release, as noted in Table 1.</p> <p>3. Table 3-3c of Enclosure 3 in Reference (c) provides the detailed descriptions on the initially tested components and subcomponents.</p> <p>4. Components bolded and underlined were tested by USAISEC-TIC. The other components in the family series were not tested; however, JITC certified the other components for joint use because they utilize the same software and similar hardware as tested and certified components and JITC analysis determined they were functionally identical for interoperability certification purposes.</p> <p>5. With DTR 4, the R0X29A, R0X30A, JL741A line card models were removed due to product expiration.</p> <p>6. With DTR 4, the SKU variants for the CX 6400 R0X24A/R0X25A, R0X26A/R0X27A, R0X38B, R0X39B, R0X40B, R0X41A, R0X42A, R0X43A, R0X44A switch models were updated from “A”/”B” to “C”.</p> | | | |
| LEGEND: | | | |
| ArubaOS | Aruba Operating System | SKU | Stock Keeping Unit |
| APL | Approved Products List | SUT | System Under Test |
| ASLAN | Assured Services Local Area Network | SFP56 | Small Form-factor Pluggable (56 Gigabit) |
| BASE-T | Baseband Operation, Twisted Pair Ethernet | TIC | Technology Integration Center |
| DoDIN | Department of Defense Information Network | UCR | Unified Capabilities Requirements |
| DTR | Desktop Review | URL | Uniform Resource Locator |
| GbE | Gigabit Ethernet | USAISEC | U.S. Army Information Systems Engineering Command |
| JITC | Joint Interoperability Test Command | VoIP | Voice over Internet Protocol |

4. Test Details. This extension of the certification is based on DTR 5. The original certification, documented in Reference (c), 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. The United States Army Information Systems Engineering Command (USAISEC) – Mission Engineering Directorate (MED), Technology Integration Center (TIC), hereafter referred to as USAISEC-TIC, completed review of the Vendor’s LoC on 3 December 2020 and conducted testing at Fort Huachuca, Arizona, from 7 December 2020 through 29 January 2021, using test procedures derived from Reference (e). DISA adjudicated outstanding TDRs on 27 April 2021. A USAISEC-TIC-led Cybersecurity (CS) test team conducted CS testing and published the results in a separate report, Reference (d). Enclosure 2 of Reference (c) documents the test results and describes the test

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network and system configurations. Enclosure 3 of Reference (c) provides the detailed interface, capability, and functional requirements and test results.

DTR 5 was requested to update the SKUs on the following CX 6300 Series switch models currently listed on the APL to ensure DoD customers order the appropriate switch:

| | |
|-------------------------------|-------------------------------|
| JL658A replaced by SKU S0G03A | JL664A replaced by SKU S0G01A |
| JL659A replaced by SKU S0G04A | JL665A replaced by SKU S0G95A |
| JL660A replaced by SKU S0G05A | JL666A replaced by SKU S0G96A |
| JL661A replaced by SKU S0G06A | JL667A replaced by SKU S0G97A |
| JL662A replaced by SKU S0F99A | JL668A replaced by SKU S0G98A |
| JL663A replaced by SKU S0G00A | JL762A replaced by SKU S0G02A |

The new SKUs are TAA-compliant, and there were no changes to the switches or software with this update.

JITC analysis determined no additional IO or CS testing was required because this request did not change the certified IO features and function or approved CS posture of the SUT. Analysis of the DTR 5 request was performed using current UCR 2013 Change 2 test procedures derived from Reference (f). See Table 4B for an updated list of certified SUT components/SKUs.

Based on analysis and no change to the certified SUT IO features and function, JITC approves DTR 5.

In addition, the current CS posture of the SUT is documented in a separate report, Reference (d).

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 containing the approved configuration and deployment guide must be requested directly from the Approved Products Certification Office (APCO) via 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/>.

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6. Point of Contact (POC). JITC POC: Ms. Jenna S. Valenzuela; commercial telephone 520-533-5442; DSN 879-5442; e-mail address: jenna.s.valenzuela.civ@mail.mil; mailing address: Joint Interoperability Test Command, C/O JTE-Jenna Valenzuela, 2001 Brainard Road (MB59), Fort Huachuca, AZ 85613. The APCO tracking number for the SUT is 2022701.

FOR THE COMMANDER:

Enclosure a/s

LAWRENCE T. DORN
Chief
Specialized Test Division

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ADDITIONAL REFERENCES

- (c) Joint Interoperability Test Command (JITC) Memo, JTE, “Joint Interoperability Certification of Aruba, a Hewlett Packard Enterprise company, CX 6000 Series Switches (CX 6200, CX 6300, and CX 6400) with Software Release Aruba Operating System (ArubaOS)-CX 10.06,” 28 July 2021
- (d) JITC, “Cybersecurity Assessment Report for Aruba, a Hewlett Packard Enterprise Company, CX Switches (6000 Series), Aruba Operating System (ArubaOS)-CX Software Release 10.13, Tracking Number (TN) 2022701,” July 2024
- (e) JITC, “Assured Services Local Area Network (ASLAN) and Non-ASLAN Test Procedures Version 1.0 for Unified Capabilities Requirements (UCR) 2013 Change 2,” October 2017
- (f) JITC, “Assured Services Local Area Network (ASLAN) and Non-ASLAN Test Procedures Version 1.1 for Unified Capabilities Requirements (UCR) 2013 Change 2,” April 2022 (Draft)