IN REPLY
REFER TO: Joint Interoperability Test Command (JTE)   1 February 2023

MEMORANDUM FOR DISTRIBUTION

SUBJECT: Extension of the Joint Interoperability Certification of the CommScope Ruckus
SmartZone (SZ) 100 Series, SZ 300, and Virtual SZ (vSZ) Series Wireless Local
Area Network (WLAN) Controllers and Specified Access Points (APs) with
Software Release 5.2.1.3

References: (a) Department of Defense (DoD) 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 (e), 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 CommScope Ruckus SmartZone (SZ) 100 Series, SZ 300,
and Virtual SZ (vSZ) Series Wireless Local Area Network (WLAN) Controllers and Specified
Access Points (APs) with Software Release 5.2.1.3 is hereinafter referred to as the System Under
Test (SUT). The SUT meets the critical requirements of the Unified Capabilities Requirements,
Reference (b), as a Wireless Intrusion Detection System (WIDS) 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) 2. DTR 2 requested the
following updates:

- Extend the DoDIN APL expiration date for an additional three (3) years.
- Update the SUT Model/Product Name from "Ruckus SmartZone (SZ) 100 Series, SZ
300, and Virtual SZ (vSZ) Series Wireless Local Area Network (WLAN) Controllers and
specified Access Points (APs)" to "CommScope Ruckus SmartZone (SZ) 100 Series, SZ
300, and Virtual SZ (vSZ) Series Wireless Local Area Network (WLAN) Controllers and
specified Access Points (APs)."
- Provide current Federal Information Processing Standards (FIPS) 140-2 Cryptographic
Module Validation Program (CMVP) certificates.

See Paragraph 4 for additional details.

JITC Memo, JTE, Extension of the Joint Interoperability Certification of the CommScope Ruckus SmartZone (SZ) 100 Series, SZ 300, and Virtual SZ (vSZ) Series Wireless Local Area Network (WLAN) Controllers and Specified Access Points (APs) with Software Release 5.2.1.3

Table 1. Conditions

Description	Operational Impact	Remarks
UCR Waivers		
None.		
TDR#	**Conditions of Fielding**	
None.		
TDR#	**Open Test Discrepancies**	
CSc-0737-001	EDG-000130: Per the vendor LoC, the SUT does not support MIB version 2 IAW RFC-4502.	None UCR Change Requirement	DISA adjudicated this discrepancy as a UCR Change Requirement
CSc-0737-002	EDG-000360.h: Per the vendor LoC, Proprietary mesh function does not meet all IEEE 802.11s-2011 requirements.	None UCR Change Requirement	DISA adjudicated this discrepancy as a UCR Change Requirement

LEGEND:
CSc	Acronym assigned for Ruckus TDRs	MIB	Management Information Base
DISA	Defense Information Systems Agency	RFC	Request for Comment
EDG	Edge	SUT	System Under Test
IAW	In Accordance With	TDR	Test Discrepancy Report
IEEE	Institute of Electrical and Electronics Engineers	UCR	Unified Capabilities Requirements
LoC	Letter of Compliance		

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 a DoDIN APL Product Summary, to include subsequent DTR updates.

Table 2. Interface Status

Interface (Protocol) (See note 1.)	Applicability (R), (O), (C) WIDS	Status	Remarks
Network Management Interface(s) (See note 2.)			
10 Mbps	C	Met	IAW IEEE 802.3i or 802.3j
100 Mbps	C	Met	IAW IEEE 802.3u
1000 Mbps	C	Met	IAW IEEE 802.3ab or 802.3z
Serial (EIA/TIA)	C	Met	
Network Interfaces(s) (See note 3.)			
5 GHz wireless, up to 54 Mbps	R	Met	IAW IEEE 802.11a (See note 2.)
2.4 GHz wireless, up to 11 Mbps	R	Met	IAW IEEE 802.11b (See note 2.)
2.4 GHz wireless, up to 54 Mbps	R	Met	IAW IEEE 802.11g (See note 2.)
MIMO wireless, up to 100 Mbps	R	Met	IAW IEEE 802.11n (See note 2.)
MIMO wireless, up to 433 Mbps	R	Met	IAW IEEE 802.11ac (See note 2.)
Multi-user MIMO wireless, up to 6.93 Gbps	O	Met	IAW IEEE 802.11ax (See notes 2 and 4.)

NOTE(S):
1. Table 3 depicts the SUT high-level requirements. Table 3-2 in Enclosure 3 of Reference (c) provides a detailed list of requirements.
2. Product shall provide at least one of the specified management interfaces.
3. To comply with SEC-000120, WIDS products shall support monitoring/scanning of all the wireless network interfaces.
4. With DTR 1, the optional 802.11ax interface was certified for the SUT based on testing performed 2-13 August 2021 by USAISEC-TIC with the SZ144 Controller and R650 US, R750, R850, and T750SE APs.

(Table continues next page.)

JITC Memo, JTE, Extension of the Joint Interoperability Certification of the CommScope
Ruckus SmartZone (SZ) 100 Series, SZ 300, and Virtual SZ (vSZ) Series Wireless Local Area
Network (WLAN) Controllers and Specified Access Points (APs) with Software Release 5.2.1.3

Table 2. Interface Status (continued)

LEGEND:			
802.3ab	1000BaseT Ethernet over twisted pair at Gbps	CSMA	Carrier Sense Multiple Access
802.3i	10BaseT Mbps over twisted pair	DTR	Desktop Review
802.3j	10BaseF over Fiber-Optic	EIA	Electronic Industries Alliance
802.3u	Standard for CSMA with collision detection at 100 Mbps	Gbps	Gigabits per second
		GHz	Giga-Hertz
802.3z	Gigabit Ethernet Standard	IAW	In Accordance With
802.11a	1.5 to 54 Mbps	IEEE	Institute of Electrical and Electronics Engineers
802.11b	11 Mbps Maximum	LAN	Local Area Network
802.11g	2.4 GHz band, 54 Mbps Maximum	Mbps	Megabits per second
802.11n	2.4 GHz and 5 GHz, 600 Mbps Maximum	O	Optional
802.11ac	5 GHz band, 3.46 Gbps Maximum	R	Required
802.11ax	Between 1 GHz and 7.125 GHz	SEC	Security
AP	Access Point	SUT	System Under Test
BaseF	Megabit Ethernet over Fiber	TIA	Telecommunications Industry Alliance
BaseT	Megabit (Baseband Operation, Twisted Pair) Ethernet	TIC	Technology Integration Center
		USAISEC	U.S. Army Information Systems Engineering Command
C	Conditional	WIDS	Wireless Intrusion Detection System

Table 3. Capability Requirements and Functional Requirements Status

CR/FR ID	UCR Requirement (See note 1.)	UCR 2013 Change 2 Reference	Status
1	General Wireless Product (R)	7.3.1	Met
2	Wireless Interface (R)	7.3.2	Met
3	Wireless Intrusion Detection System (R)	7.3.4	Met
4	IPv6 Requirements (R)	5.2	See note 2.

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 for the SUT.
2. WIDS operates at Layer 2, so IPv6 is not applicable.

LEGEND:			
CR	Capability Requirements	R	Required
FR	Functional Requirement	SUT	System Under Test
ID	Identification	UCR	Unified Capabilities Requirements
IPv6	Internet Protocol version 6	WIDS	Wireless Intrusion Detection System

Table 4. DoDIN APL Product Summary

Product Identification			
Product Name	SZ 100 Series, SZ 300, and vSZ Series WLAN Controllers and Specified APs		
Software Release	5.2.1.3 (See note 1.)		
UCR Product Type(s)	WIDS		
Product Description	Wireless LAN controllers and APs that provide wireless network connectivity for the access layer.		
DoDIN Certified Function	**Component/Sub-component Name** (See notes 2 and 3.)	**Tested Version** (See note 1.)	**Remarks**
Wireless LAN Controller	**SmartZone 300 Controller (SZ300)** **SmartZone 100 Controller (SZ144)** SmartZone 100 Controller (SZ124) **SmartZone 100 Controller (SZ104)**	**5.2.1.3**	See note 4.

(Table continues next page.)

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JITC Memo, JTE, Extension of the Joint Interoperability Certification of the CommScope Ruckus SmartZone (SZ) 100 Series, SZ 300, and Virtual SZ (vSZ) Series Wireless Local Area Network (WLAN) Controllers and Specified Access Points (APs) with Software Release 5.2.1.3

Table 4. DoDIN APL Product Summary (continued)

DoDIN Certified Function	Component/Sub-component Name (See notes 2 and 3.)	Tested Version (See note 1.)	Remarks
Virtual Wireless LAN Controller	**Virtual SmartZone Essentials (vSZ-E)** Virtual SmartZone High Scale (vSZ-H)		(See note 5.)
Access Points	**R850** **R750** **R720 AP** **R710 AP** **T750SE** T750 T710 AP **R650 US** **R610 AP** T610 AP	**5.2.1.3**	See note 4.

NOTE(S):
1. The SUT was originally tested and certified with Software Release version 5.1.2. Subsequent DTR updated the Software Release version as follows: DTR 1 - from 5.1.2 to 5.2.1.3.
2. Table 3-3 in Enclosure 3 of Reference (c) provides the detailed descriptions on the initially tested components and sub-components.
3. Components bolded and underlined were tested by JITC or 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.
4. With DTR 1, the SZ144 Controller and R650 US, R750, R850, and T750SE APs were added based on testing conducted by USAISEC-TIC 2-13 August 2021. In addition, the T750 AP was added based on analysis and similarity to the tested T750SE AP.
5. The VM used for test was configured with 32 GB RAM, 6 CPU Intel(R) Xeon(R) CPU D 1528 @ 1.90GHz, and 256 GB Disk Space. See Vendor literature to determine the number of APs and clients that can be supported by the vSZ-E with different VM configurations.

LEGEND:
AP	Access Point	SUT	System Under Test
APL	Approved Products List	SZ	SmartZone
CPU	Central Processing Unit	TIC	Technology Integration Center
DTR	Desktop Review	UCR	Unified Capabilities Requirements
DoDIN	Department of Defense Information Network	US	United States
GB	Gigabit	USAISEC	U.S. Army Information Systems Engineering Command
Gbps	Gigabits per second	VM	Virtual Machine
JITC	Joint Interoperability Test Command	vSZ	Virtual SmartZone
LAN	Local Area Network	WIDS	Wireless Intrusion Detection System
N/A	Not Applicable	WLAN	Wireless LAN
RAM	Random Access Memory		

4. Test Details. This extension of the certification is based on DTR 2. 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 Technical 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, conducted testing at Fort Huachuca, Arizona, from 21 October through 15 November 2019, using test procedures derived from Reference (d), and completed review of the Vendor's LoC on 18 November 2019. DISA completed adjudication of outstanding TDRs on 17 December 2019. A USAISEC-TIC-led Cybersecurity (CS) test team conducted CS testing and published the results in a separate report, Reference (e). Enclosure 2 of Reference (c) documents the test results and describes the tested network and system configurations. Enclosure 3 of Reference (c) provides the detailed interface, capability, and functional requirements and test results.

JITC Memo, JTE, Extension of the Joint Interoperability Certification of the CommScope Ruckus SmartZone (SZ) 100 Series, SZ 300, and Virtual SZ (vSZ) Series Wireless Local Area Network (WLAN) Controllers and Specified Access Points (APs) with Software Release 5.2.1.3

DTR 2 requested the following updates:

- Extend the DoDIN APL expiration date for an additional three (3) years.
- Update the SUT Model/Product Name from "Ruckus SmartZone (SZ) 100 Series, SZ 300, and Virtual SZ (vSZ) Series Wireless Local Area Network (WLAN) Controllers and specified Access Points (APs)" to "CommScope Ruckus SmartZone (SZ) 100 Series, SZ 300, and Virtual SZ (vSZ) Series Wireless Local Area Network (WLAN) Controllers and specified Access Points (APs)."
- Provide current FIPS 140-2 CMVP certificates.

JITC analysis determined no additional CS or IO testing was required because these updates did not change the certified IO features and functions or approved CS posture of the SUT. Analysis of the DTR request was based on current UCR 2013 Change 2 test procedures, Reference (e). Furthermore, there were no past due CS or IO Vendor Plan of Action and Milestones (POA&Ms).

Based on analysis, no change to the certified IO features and functions, and no past due Vendor POA&Ms, JITC approves DTR 2.

In addition, the current CS posture of the SUT and the current FIPS 140-2 CMVP certificates are documented in a separate report, Reference (e).

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) 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 CommScope Ruckus SmartZone (SZ) 100 Series, SZ 300, and Virtual SZ (vSZ) Series Wireless Local Area Network (WLAN) Controllers and Specified Access Points (APs) with Software Release 5.2.1.3

6.   Point of Contact (POC). POC: Ms. Lisa Esquivel; commercial telephone (520) 538-5531; DSN telephone 879-5531; e-mail address: lisa.r.esquivel.civ@mail.mil; mailing address: Joint Interoperability Test Command, ATTN: JTE (Ms. Lisa Esquivel), P.O. Box 12798, Fort Huachuca, Arizona 85670-2798. The APCO tracking number for the SUT is 1912001.

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 the Ruckus SmartZone (SZ) 100 Series, SZ 300, and Virtual SZ (vSZ) Series Wireless Local Area Network (WLAN) Controllers and specified Access Points (APs) with Software Release 5.1.2," 13 February 2021

(d) JITC, "Unified Capabilities Wireless Intrusion Detection System (WIDS) Test Procedures Version 1.1 For Unified Capabilities Requirements (UCR) 2013 Change 2," December 2022 (Draft)

(e) JITC, "Cybersecurity Assessment Report for CommScope Ruckus SmartZone (SZ) 100 Series, SZ 300, and Virtual SZ (vSZ) Series WLAN Controllers and specified APs, Software Release 5.2.1.3, Tracking Number (TN) 1912001," January 2023

Enclosure