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) Wireless Local Area
Network (WLAN) Controllers and Specified Access Points 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 (CA) 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) 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
(UCR), Reference (b), as a Wireless Local Area Network Access System (WLAS) and Wireless
Access Bridge (WAB) 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 Review (DTR) 3. DTR 3 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.

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Table 1. Conditions

Description	Operational Impact	Remarks
UCR Waivers		
None.		
TDR#	**Conditions of Fielding**	
None.		
TDR#	**Open Test Discrepancies**	
CSc-0738-001	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-0738-002	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 CommScope Ruckus TDRs	MIB	Management Information Base
DISA	Defense Information Systems Agency	RFC	Request or Comments
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)		Status	Remarks
	WLAS	WAB		
Network Management Interface(s) (See note 2.)				
IEEE 802.3i (10 Mbps)	R	R	Met	
IEEE 802.3j (10 Mbps)	R	R	Met	
IEEE 802.3u (100 Mbps)	R	R	Met	
IEEE 802.3z (1000 Mbps)	R	R	Met	
IEEE 802.3ab (1000 Mbps)	R	R	Met	
Serial (EIA/TIA)	C	C	Met	
Network Interfaces(s) (See note 3.)				
IEEE 802.11a IAW 802.11-2012 Clause 18 – 5 GHz	R	R	Met	
IEEE 802.11b IAW 802.11-2012 Clause 17 – 2.4 GHz	R	R	Met	
IEEE 802.11g IAW 802.11-2012 Clause 19 – 2.4 GHz	R	R	Met	
IEEE 802.11n IAW 802.11-2012 Clause 20 - 2.4 GHz and 5 GHz	R	R	Met	
IEEE 802.11ac IAW amendment 802.11ac-2013	C	C	Met	
IEEE 802.11ax-2021	O	O	Met	See note 4.
IEEE 802.16 IAW 802.16-2012	C	C	Not Tested	See note 5.
IEEE 802.3i (10 Mbps)	R	R	Met	

(Table continues next page.)

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Table 2. Interface Status (continued)

Interface (Protocol) (See note 1.)	Applicability (R), (O), (C)		Status	Remarks
	WLAS	WAB		
Network Interfaces(s) (See note 3.) (continued)				
IEEE 802.3j (10 Mbps)	R	R	Met	
IEEE 802.3u (100 Mbps)	R	R	Met	
IEEE 802.3z (1000 Mbps)	R	R	Met	
IEEE 802.3ab (1000 Mbps)	R	R	Met	

NOTE(S):
1. The SUT high-level requirements are depicted in Table 3. These high-level requirements refer to a more detailed list of requirements provided in Table 3-2 in Enclosure 3 of Reference (c).
2. Product shall provide at least one of the specified management interfaces.
3. Product shall support at least one of the specified wireless protocols (802.11/16) and one of the wired network interfaces (802.3).
4. With DTR 2, the optional 802.11ax interface was certified for the SUT based on testing 2-13 August 2021 conducted by USAISEC-TIC with SZ144 Controller and the R650 US, R750, R850, and T750SE APs.
5. The SUT does not support 802.16 protocols.

LEGEND:
C	Conditional	O	Optional
EIA	Electronic Industries Alliance	R	Required
GHz	Giga-Hertz	SUT	System Under Test
IAW	In Accordance With	TIA	Telecommunications Industry Alliance
IEEE	Institute of Electrical and Electronics Engineers	WAB	Wireless Access Bridge
LAN	Local Area Network	WLAS	Wireless LAN Access System
Mbps	Mega Bits Per Second		

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 LAN Access System (R)	7.3.4	Partially Met (See note 2.)
4	Wireless Access Bridge (R)	7.3.5	Partially Met (See note 3.)
5	IPv6 Requirements (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 for the SUT.
2. Per the vendor LoC, the SUT does not support MIB version 2 IAW RFC-4502.   DISA adjudicated this discrepancy as a UCR Change Requirement, as noted in Table 1.
3. Per the vendor LoC, Proprietary mesh function does not meet all IEEE 802.11s-2011 requirements. DISA adjudicated this discrepancy as a UCR Change Requirement, as noted in Table 1.

LEGEND:
CR	Capability Requirements	LAN	Local Area Network
DISA	Defense Information Systems Agency	MIB	Management Information Base
FR	Functional Requirement	R	Required
IAW	In Accordance With	RFC	Request for Comment
IEEE	Institute of Electrical and Electronics Engineers	SUT	System Under Test
ID	Identification	UCR	Unified Capabilities Requirements
IPv6	Internet Protocol version 6	WLAS	Wireless LAN Access System
LoC	Letter of Compliance		

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Table 4. DoDIN APL Product Summary

Product Identification			
Product Name	SmartZone (SZ) 100 Series, SZ 300, and Virtual SZ (vSZ) Series WLAN Controllers with APs		
Software Release	5.2.1.3 (See note 1.)		
UCR Product Type(s)	WLAS/WAB		
Product Description	Wireless LAN controllers and APs that work together to support the functionality of a WLAS and/or a WAB for providing wireless network connectivity to wireless endpoints.		
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.
Virtual Wireless LAN Controller	**Virtual SmartZone Essentials (vSZ-E)** Virtual SmartZone High Scale (vSZ-H)		See note 5.
Access Point	**R850** **R750** **R720 AP** **R710 AP** **T710 AP** **R650 US** **R610 AP** **T750SE** T750 T610 AP		See note 4.

NOTE(S):
1. The SUT was originally tested and certified with Software Release version 5.1.2. With DTR 1, the SUT Software Release version was updated from 5.1.2 to 5.2.1.3
2. Table 3-3 of Enclosure 3 in Reference (c) provides the detailed component and subcomponent descriptions included in the initial certification.
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 2, 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
DoDIN	Department of Defense Information Network	UCR	Unified Capabilities Requirements
DTR	Desktop Review	USAISEC	U.S. Army Information Systems Engineering Command
GB	Gigabits	VM	Virtual Machine
GHz	Gigahertz	vSZ-E	Virtual SmartZone Essentials
LAN	Local Area Network	vSZ-H	Virtual SmartZone High Scale
RAM	Random Access Memory	WAB	Wireless Access Bridge
JITC	Joint Interoperability Test Command	WLAS	Wireless LAN Access System

4. Test Details. This extension of the certification is based on DTR 3. The original certification, documented in Reference (c), was based on interoperability (IO) testing, review of the Vendor's Letter of Compliance (LoC) and DISA adjudication of open Technical Discrepancy Reports (TDRs) 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

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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.

DTR 3 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. 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 3.

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 IP Data (formerly known as NIPRNet) e-mail. Interoperability status information is available via the JITC System Tracking Program (STP). STP is accessible by .mil/.gov users at https://stp.jitc.disa.mil/. Test reports, lessons learned, and related testing documents and references are on the JITC Industry Toolkit (JIT) at https://jit.fhu.disa.mil/. Due to the sensitivity of the information, the CS Assessment Package (CAP) 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/.

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6. Point of Contact (POC). JITC certification POC: Ms. Lisa Esquivel; commercial telephone (520) 538-5531 or DSN 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 1911901.

FOR THE COMMANDER:

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ADDITIONAL REFERENCES

(c) Joint Interoperability Test Command (JITC), "Joint Interoperability Certification of the Ruckus SmartZone (SZ) 100 Series, SZ 300, and Virtual SZ (vSZ) Wireless Local Area Network (WLAN) Controllers and Specified Access Points with Software Release 5.1.2,"
13 February 2020

(d) JITC, "Unified Capabilities Wireless LAN Access System (WLAS) and Wireless Access Bridge (WAB) Test Procedures Version 1.0, For Unified Capabilities Requirements (UCR) 2013 Change 2," July 2019

(e) JITC, "Cybersecurity Assessment Report for CommScope Ruckus SmartZone (SZ) 100 Series, SZ 300, and Virtual SZ (vSZ) Series WLAN Controllers with specified APs, Software Release 5.2.1.3, Tracking Number (TN) 1911901," January 2023

Enclosure