

RUCKUS Solo APs Configuration Guide - 6 GHz Radio Configuration Using CLI

Supporting Three-radio 6.0 GHz APs

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Preface

Contacting RUCKUS Customer Services and Support

The Customer Services and Support (CSS) organization is available to provide assistance to customers with active warranties on their RUCKUS products, and customers and partners with active support contracts.

For product support information and details on contacting the Support Team, go directly to the RUCKUS Support Portal using <https://support.ruckuswireless.com>, or go to <https://www.commscope.com/ruckus> and select **Support**.

What Support Do I Need?

Technical issues are usually described in terms of priority (or severity). To determine if you need to call and open a case or access the self-service resources, use the following criteria:

- Priority 1 (P1)—Critical. Network or service is down and business is impacted. No known workaround. Go to the **Open a Case** section.
- Priority 2 (P2)—High. Network or service is impacted, but not down. Business impact may be high. Workaround may be available. Go to the **Open a Case** section.
- Priority 3 (P3)—Medium. Network or service is moderately impacted, but most business remains functional. Go to the **Self-Service Resources** section.
- Priority 4 (P4)—Low. Requests for information, product documentation, or product enhancements. Go to the **Self-Service Resources** section.

Open a Case

When your entire network is down (P1), or severely impacted (P2), call the appropriate telephone number listed below to get help:

- Continental United States: 1-855-782-5871
- Canada: 1-855-782-5871
- Europe, Middle East, Africa, Central and South America, and Asia Pacific, toll-free numbers are available at <https://support.ruckuswireless.com/contact-us> and Live Chat is also available.
- Worldwide toll number for our support organization. Phone charges will apply: +1-650-265-0903

We suggest that you keep a physical note of the appropriate support number in case you have an entire network outage.

Self-Service Resources

The RUCKUS Support Portal at <https://support.ruckuswireless.com> offers a number of tools to help you to research and resolve problems with your RUCKUS products, including:

- Technical Documentation—<https://support.ruckuswireless.com/documents>
- Community Forums—<https://forums.ruckuswireless.com/>
- Knowledge Base Articles—<https://support.ruckuswireless.com/answers>
- Software Downloads and Release Notes—https://support.ruckuswireless.com/#products_grid
- Security Bulletins—<https://support.ruckuswireless.com/security>

Using these resources will help you to resolve some issues, and will provide TAC with additional data from your troubleshooting analysis if you still require assistance through a support case or RMA. If you still require help, open and manage your case at https://support.ruckuswireless.com/case_management.

Document Feedback

RUCKUS is interested in improving its documentation and welcomes your comments and suggestions.

You can email your comments to RUCKUS at [#Ruckus-Docs@commscope.com](mailto:Ruckus-Docs@commscope.com).

When contacting us, include the following information:

- Document title and release number
- Document part number (on the cover page)
- Page number (if appropriate)

For example:

- RUCKUS SmartZone Upgrade Guide, Release 5.0
- Part number: 800-71850-001 Rev A
- Page 7

RUCKUS Product Documentation Resources

Visit the RUCKUS website to locate related documentation for your product and additional RUCKUS resources.

Release Notes and other user documentation are available at <https://support.ruckuswireless.com/documents>. You can locate the documentation by product or perform a text search. Access to Release Notes requires an active support contract and a RUCKUS Support Portal user account. Other technical documentation content is available without logging in to the RUCKUS Support Portal.

White papers, data sheets, and other product documentation are available at <https://www.commscope.com/ruckus>.

Online Training Resources

To access a variety of online RUCKUS training modules, including free introductory courses to wireless networking essentials, site surveys, and products, visit the RUCKUS Training Portal at <https://commscopeuniversity.myabsorb.com/>. The registration is a two-step process described in this [video](#). You create a CommScope account and then register for, and request access for, CommScope University.

Document Conventions

The following table lists the text conventions that are used throughout this guide.

TABLE 1 Text Conventions

Convention	Description	Example
monospace	Identifies command syntax examples	<code>device(config)# interface ethernet 1/1/6</code>
bold	User interface (UI) components such as screen or page names, keyboard keys, software buttons, and field names	On the Start menu, click All Programs .
<i>italics</i>	Publication titles	Refer to the <i>RUCKUS Small Cell Release Notes</i> for more information.

Notes, Cautions, and Safety Warnings

Notes, cautions, and warning statements may be used in this document. They are listed in the order of increasing severity of potential hazards.

NOTE

A NOTE provides a tip, guidance, or advice, emphasizes important information, or provides a reference to related information.

ATTENTION

An ATTENTION statement indicates some information that you must read before continuing with the current action or task.



CAUTION

A CAUTION statement alerts you to situations that can be potentially hazardous to you or cause damage to hardware, firmware, software, or data.



DANGER

A DANGER statement indicates conditions or situations that can be potentially lethal or extremely hazardous to you. Safety labels are also attached directly to products to warn of these conditions or situations.

Command Syntax Conventions

Bold and italic text identify command syntax components. Delimiters and operators define groupings of parameters and their logical relationships.

Convention	Description
bold text	Identifies command names, keywords, and command options.
<i>italic text</i>	Identifies a variable.
[]	Syntax components displayed within square brackets are optional. Default responses to system prompts are enclosed in square brackets.
{x y z}	A choice of required parameters is enclosed in curly brackets separated by vertical bars. You must select one of the options.
x y	A vertical bar separates mutually exclusive elements.
< >	Nonprinting characters, for example, passwords, are enclosed in angle brackets.
...	Repeat the previous element, for example, <i>member[member...]</i> .
\	Indicates a "soft" line break in command examples. If a backslash separates two lines of a command input, enter the entire command at the prompt without the backslash.

About This Guide

Introduction

RUCKUS AP solo currently has no GUI support to configure the 6GHz radio. This document's purpose is to provide a way to configure 6GHz radio via CLI: Configure SSID/s, Security mode to help associate 6E capable clients.

New In This Document

TABLE 2 Key Features and Enhancements (May 2022)

Feature	Description	Reference
Initial draft	New: Configure 6GHz radio using CLI.	

Creating an SSID for 6 GHz Radio

The 118.x.x firmware that supports three-radio APs provides the following encryption options:

- WPA3-SAE
- OWE
- WPA3-Enterprise

NOTE

The default operation band on the 3rd radio is 5 GHz. The operation band must be switched from 5 GHz to 6 GHz and a system reboot must be performed to effect band switchover.

```
rkscli: set band wifi2 6g
rkscli: reboot
```

To create an SSID with any authentication type (SAE, EAP (.1X), and OWE), follow the sequence:

1. Configure encryption on 6G WLAN
2. Configure the state of the 6G WLAN: `set state wlan16 up`
3. Configure the SSID of the 6G WLAN: `set ssid wlan16 <AP_model>_Test`

A 6 GHz setting on a solo AP can be configured using rkscli only, as shown in the following example:

WPA3-SAE

```
rkscli: set encryption wlan16
Wireless Encryption Type: [0] quit, [1] WPA
Wireless Encryption Type: 1
WPA Protocol Version: [0] quit, [1] WPA3
WPA Protocol Version: 1
WPA Authentication Type: [0] quit, [1] SAE, [2] EAP (.1X), or [3] OWE
WPA Authentication Type: 1
WPA Cipher Type: [0] quit, [1] AES-CCMP, [2] AES-CCMP256, [3] AES-GCMP, or [4] AES-GCMP256
WPA Cipher Type: 1
Enter A SAE PassPhrase [8-127 letters] : password
SAE H2E Type: [0] quit, [1] Disable, [2] Enable, or [3] H2E Only
SAE H2E Type: 3
WPA no error
OK
```

OWE

```
rkscli: set encryption wlan16
Wireless Encryption Type: [0] quit, [1] WPA
Wireless Encryption Type: 1
WPA Protocol Version: [0] quit, [1] WPA3
WPA Protocol Version: 1
WPA Authentication Type: [0] quit, [1] SAE, [2] EAP (.1X), or [3] OWE
WPA Authentication Type: 3
WPA Cipher Type: [0] quit, [1] AES-CCMP, [2] AES-CCMP256, [3] AES-GCMP, or [4] AES-GCMP256
WPA Cipher Type: 1
WPA no error
OK
rkscli:
```

WPA3-Enterprise

```
rkscli: set encryption wlan16
Wireless Encryption Type: [0] quit, [1] WPA
Wireless Encryption Type: 1
WPA Protocol Version: [0] quit, [1] WPA3
WPA Protocol Version: 1
WPA Authentication Type: [0] quit, [1] SAE, [2] EAP (.1X), or [3] OWE
WPA Authentication Type: 2
WPA Cipher Type: [0] quit, [1] AES-CCMP, [2] AES-CCMP256, [3] AES-GCMP, or [4] AES-GCMP256
WPA Cipher Type: 1
NAS-ID (network access server ID): "b4:79:c8:fe:bc:40"
Enter A New NAS-ID [1-63 letters], or Press "Enter" to Accept :
-----
Primary Authentication Server
-----
IP      :
Port    :
Secret  :
-----
Select server to set: [0] quit, [1] Primary, [2] Backup1, or [3] Backup2
Select : 1
Enter A New IP      : 10.174.72.123
Enter A New Port    : 1812
Enter A New Secret  : testing123
-----
Primary Authentication Server
-----
IP      : 10.174.72.123
Port    : 1812
Secret  : testing123
-----
Select server to change (or 4 to skip): [0] quit, [1] Primary, [2] Backup1, or [3] Backup2
Select : 4
-----
Primary Accounting Server
-----
IP      :
Port    :
Secret  :
-----
Select server to change (or 4 to skip): [0] quit, [1] Primary, [2] Backup1, or [3] Backup2
Select : 4
WPA no error
OK
rkscli:
```




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