

# RUCKUS SmartZone (ST-GA) User Management Guide, 7.0.0

**Supporting SmartZone 7.0.0**

© 2024 CommScope, Inc. All rights reserved.

No part of this content may be reproduced in any form or by any means or used to make any derivative work (such as translation, transformation, or adaptation) without written permission from CommScope, Inc. and/or its affiliates ("CommScope"). CommScope reserves the right to revise or change this content from time to time without obligation on the part of CommScope to provide notification of such revision or change.

## Export Restrictions

These products and associated technical data (in print or electronic form) may be subject to export control laws of the United States of America. It is your responsibility to determine the applicable regulations and to comply with them. The following notice is applicable for all products or technology subject to export control:

*These items are controlled by the U.S. Government and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. government or as otherwise authorized by U.S. law and regulations.*

## Disclaimer

THIS CONTENT AND ASSOCIATED PRODUCTS OR SERVICES ("MATERIALS"), ARE PROVIDED "AS IS" AND WITHOUT WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED. TO THE FULLEST EXTENT PERMISSIBLE PURSUANT TO APPLICABLE LAW, COMMSCOPE DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, TITLE, NON-INFRINGEMENT, FREEDOM FROM COMPUTER VIRUS, AND WARRANTIES ARISING FROM COURSE OF DEALING OR COURSE OF PERFORMANCE. CommScope does not represent or warrant that the functions described or contained in the Materials will be uninterrupted or error-free, that defects will be corrected, or are free of viruses or other harmful components. CommScope does not make any warranties or representations regarding the use of the Materials in terms of their completeness, correctness, accuracy, adequacy, usefulness, timeliness, reliability or otherwise. As a condition of your use of the Materials, you warrant to CommScope that you will not make use thereof for any purpose that is unlawful or prohibited by their associated terms of use.

## Limitation of Liability

IN NO EVENT SHALL COMMSCOPE, COMMSCOPE AFFILIATES, OR THEIR OFFICERS, DIRECTORS, EMPLOYEES, AGENTS, SUPPLIERS, LICENSORS AND THIRD PARTY PARTNERS, BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, PUNITIVE, INCIDENTAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER, EVEN IF COMMSCOPE HAS BEEN PREVIOUSLY ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, WHETHER IN AN ACTION UNDER CONTRACT, TORT, OR ANY OTHER THEORY ARISING FROM YOUR ACCESS TO, OR USE OF, THE MATERIALS. Because some jurisdictions do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of liability for consequential or incidental damages, some of the above limitations may not apply to you.

## Trademarks

CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see <https://www.commscope.com/trademarks>. All product names, trademarks, and registered trademarks are the property of their respective owners.

## Patent Marking Notice

For applicable patents, see [www.cs-pat.com](http://www.cs-pat.com).

# Contents

---

<b>Contact Information, Resources, and Conventions.....</b>	<b>5</b>
Contacting RUCKUS Customer Services and Support.....	5
What Support Do I Need?.....	5
Open a Case.....	5
Self-Service Resources.....	6
Document Feedback.....	6
RUCKUS Product Documentation Resources.....	6
Online Training Resources.....	6
Document Conventions.....	7
Notes, Cautions, and Safety Warnings.....	7
Command Syntax Conventions.....	7
<b>About This Guide.....</b>	<b>9</b>
New in This Document.....	9
<b>Users and Roles.....</b>	<b>11</b>
User Roles.....	11
Local Users.....	14
Subscription Package.....	18
Limitations When Applying Role Policies to Users.....	19
For SZ100 and vSZ-E.....	19
For SZ300 and vSZ-H.....	20



# Contact Information, Resources, and Conventions

---

- [Contacting RUCKUS Customer Services and Support](#)..... 5
- [Document Feedback](#)..... 6
- [RUCKUS Product Documentation Resources](#)..... 6
- [Online Training Resources](#)..... 6
- [Document Conventions](#)..... 7
- [Command Syntax Conventions](#)..... 7

## 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.ruckusnetworks.com> 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://community.ruckuswireless.com>
- Knowledge Base Articles—<https://support.ruckuswireless.com/answers>
- Software Downloads and Release Notes—[https://support.ruckuswireless.com/#products\\_grid](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](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.ruckusnetworks.com>.

## 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>
<b>bold</b>	User interface (UI) components such as screen or page names, keyboard keys, software buttons, and field names	On the <b>Start</b> menu, click <b>All Programs</b> .
<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
<b>bold text</b>	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

---

- [New in This Document..... 9](#)

## New in This Document

**TABLE 2** Key Features and Enhancements in *SmartZone 7.0.0 Rev A*

Feature	Description	Reference
Minor Editorial Updates.	Through the guide.	February 2024



# Users and Roles

- User Roles..... 11
- Local Users..... 14
- Subscription Package..... 18
- Limitations When Applying Role Policies to Users..... 19

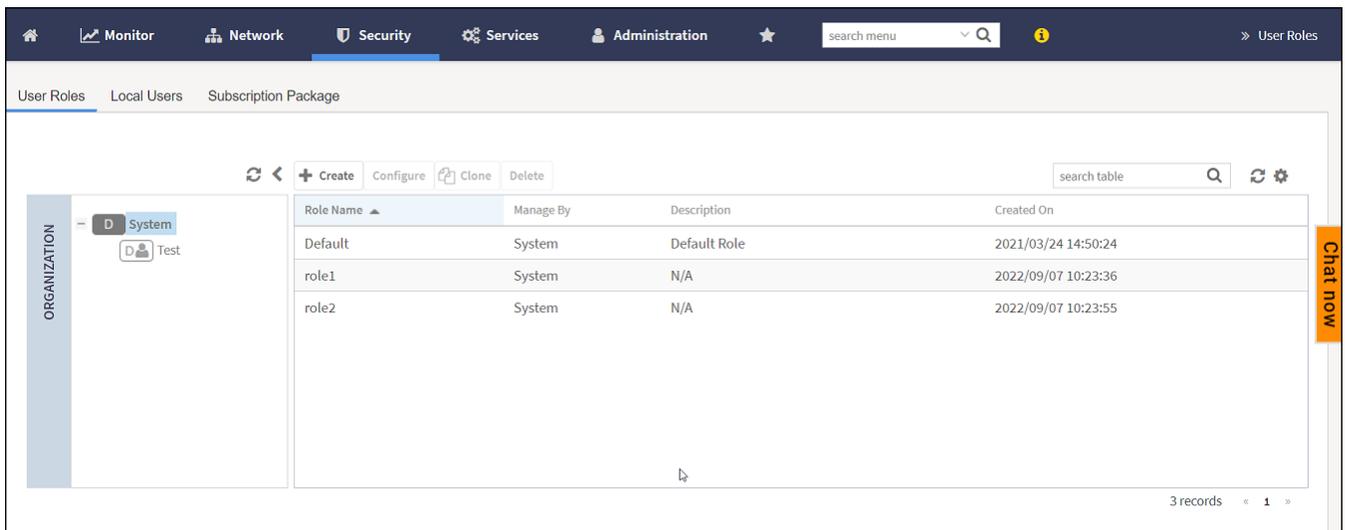
## User Roles

A user role is created to limit user access or to allow a user to log in with nonstandard client devices.

Complete the following steps to create a user role.

1. From the main menu, click **Security > Access Control > Users & Roles > User Roles**. The **User Roles** tab is displayed.

**FIGURE 1** User Roles Tab



2. Click **Create**.

The **Create User Role** page is displayed.

**FIGURE 2** Creating User Role

**Create User Role**

\* Role Name:

Description:

\* User Traffic Profile: System Default

\* Firewall Profile: System Default

Access VLAN: VLAN ID

OFF Enable VLAN Pooling

Time Schedule Policy:  Allow All  Allow Specific

**OK** **Cancel**

3. Complete the following fields:

- **Role Name:** Enter a name for the user role.
- **Description:** Enter a description for the user role.
- **User Traffic Profiles:** Select a user traffic profile from the list or click the (+) icon to create a user traffic profile. Refer to "Creating a User Traffic Profile" in the *RUCKUS SmartZoneTraffic Management Guide*.

**NOTE**

Click the **Edit Icon** (🔧) to modify the selected user traffic profile.

- **Firewall Profile:** Select a firewall profile from the list or click the (+) icon to create a firewall profile. Refer to "Managing a Firewall Profile" in the *RUCKUS SmartZone Security Guide*.

**NOTE**

Click the **Edit Icon** (🔧) to modify the selected firewall profile.

- **Access VLAN:** In the **VLAN ID** field, enter a valid VLAN ID or set **Enable VLAN Pooling** to **ON** and select the VLAN ID from the list, or click the (+) icon to create a VLAN pooling profile. Refer to "VLAN Pooling" in the *RUCKUS SmartZone Security Guide*.

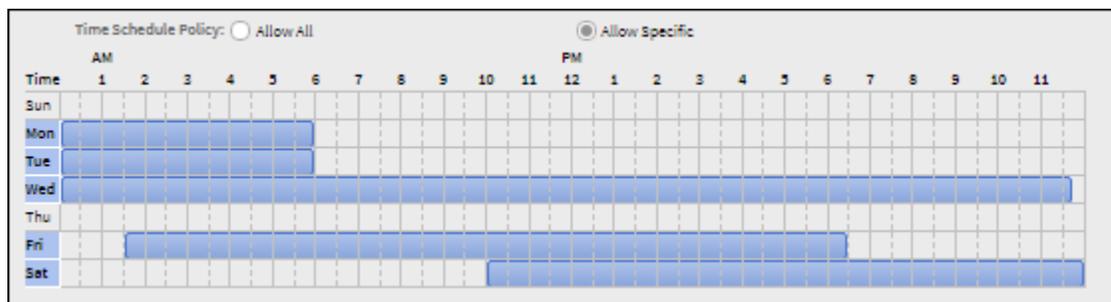
**NOTE**

Click the **Edit Icon** (🔧) to modify the selected VLAN pooling profile.

- **Time Schedule Policy:** Select either the **Allow All** or **Allow Specific** options. By default, **Allow All** is selected.

If you select the **Allow Specific** option, you can click and drag the **Time** scale to choose specific times and dates to schedule the policy.

**FIGURE 3** Allow Specific Options



4. Click **OK**.

**NOTE**

You can also edit, clone, and delete user roles by selecting the **Configure**, **Clone**, and **Delete** options respectively, from the **User Roles** tab.

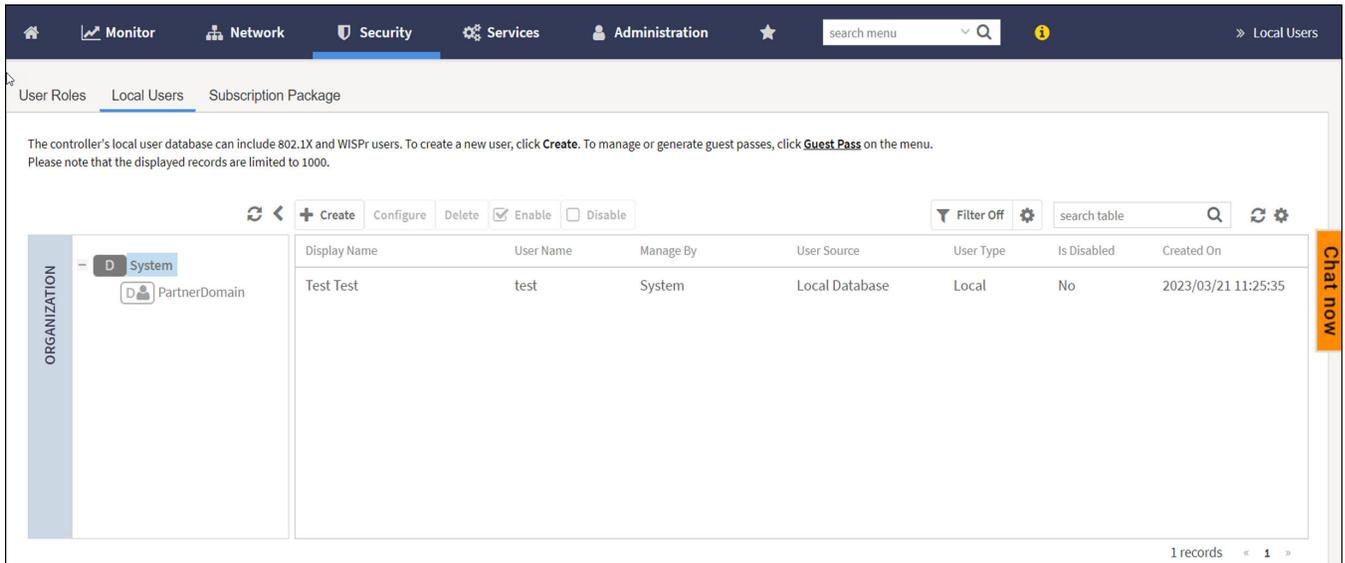
# Local Users

A local user in the controller refers to a registered user who may be given access to the controller hotspot. A user account comprises the personal information of the user, logon details, and the subscription package that is assigned to the user. The local user database of the controller can include 802.1X and WISPr authentication.

When you create a user account, you must assign a subscription package to the user. Before creating a user account, RUCKUS recommends creating at least one subscription package. Refer to [Subscription Package](#) on page 18 for more information.

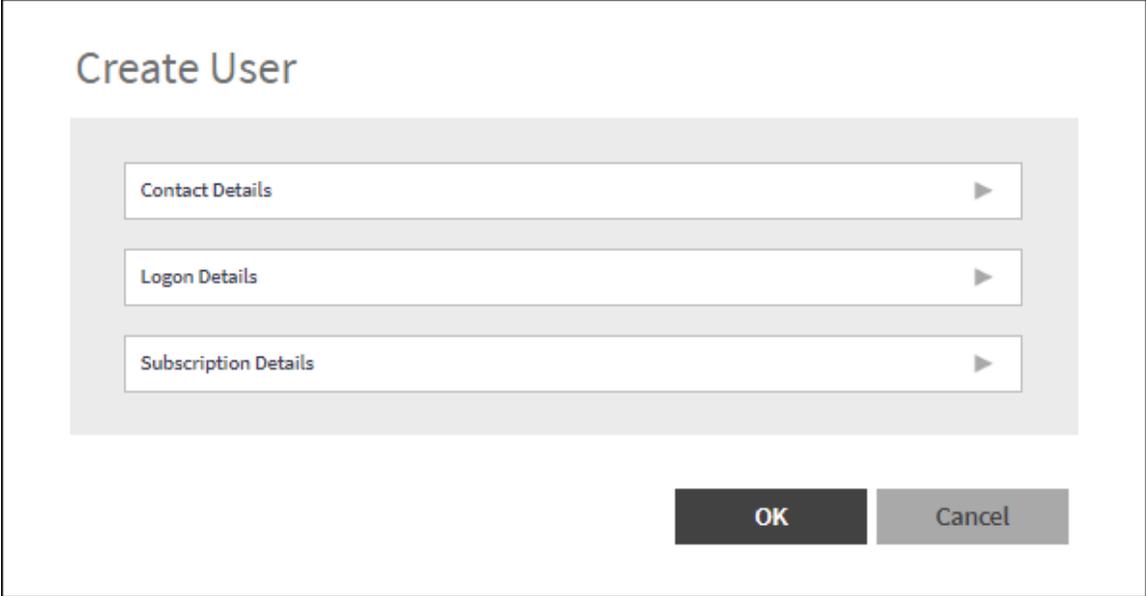
1. From the main menu, click **Security > Access Control > Users & Roles > Local Users**. The **Local Users** tab is displayed.

FIGURE 4 Local Users Tab



- 2. Click **Create**.  
The **Create User** page is displayed.

**FIGURE 5** Create User Page



3. In the **Contact Details** section, complete the following fields:

**NOTE**

The fields marked with an asterisk (\*) are mandatory.

**FIGURE 6** Create User: Contact Details Options

The screenshot shows a 'Create User' dialog box with a title bar. Below the title bar is a section titled 'Contact Details' with a dropdown arrow. This section contains several input fields: 'First Name' (mandatory, marked with an asterisk), 'Last Name' (mandatory, marked with an asterisk), 'Email', 'Phone', 'Address', 'City', 'State', 'Zip Code', 'Country' (a dropdown menu currently showing 'UNITED STATES'), and 'Remark'. Below the 'Contact Details' section are two more sections: 'Logon Details' and 'Subscription Details', each with a right-pointing arrow. At the bottom right of the dialog box are two buttons: 'OK' and 'Cancel'.

- **First Name:** Enter the first name of the user.
- **Last Name:** Enter the last name of the user.
- **Email:** Enter the email address of the user.
- **Phone:** Enter the phone number of the user.
- **Address:** Enter the street address of the user.
- **City:** Enter the city of the user.

- **State:** Enter the state of the user.
  - **Zip Code:** Enter the zip code of the user.
  - **Country:** Select the country of the user from the list.
  - **Remark:** (Optional) Enter any specific information regarding the user.
4. In the **Logon Details** section, complete the following fields:

**FIGURE 7** Create User: Logon Details Options

The screenshot shows a 'Create User' dialog box with a light gray background. At the top, the title 'Create User' is displayed in a large, dark font. Below the title, there are three expandable sections: 'Contact Details' (with a right-pointing arrow), 'Logon Details' (with a downward-pointing arrow), and 'Subscription Details' (with a right-pointing arrow). The 'Logon Details' section is expanded, revealing three input fields: 'User Name:', 'Password:', and 'Confirm New Password:'. Each field has a small red asterisk to its left, indicating a required field. Below the input fields, there are two buttons: 'OK' (a dark gray button with white text) and 'Cancel' (a light gray button with dark gray text).

- **User Name:** Enter the user name.

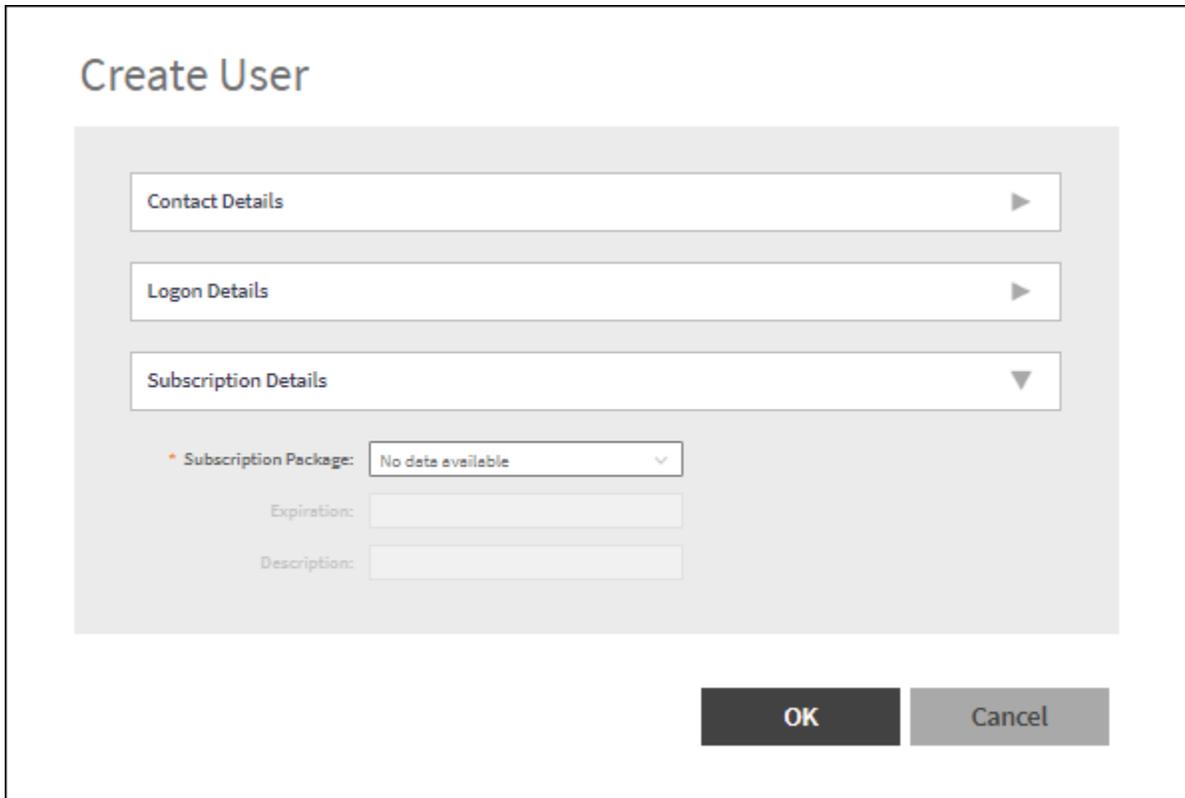
**NOTE**

The username is displayed in lowercase and is not case-sensitive.

- **Password:** Enter a password of at least eight characters in length.
- **Confirm New Password:** Re-enter the password.

5. In the **Subscription Details** section, select a subscription package from the **Subscription Package** list for the new user.

**FIGURE 8** Create User: Subscription Details Options



The screenshot shows a 'Create User' form with three expandable sections: 'Contact Details', 'Logon Details', and 'Subscription Details'. The 'Subscription Details' section is expanded, showing a 'Subscription Package' dropdown menu with 'No data available' selected, and two input fields for 'Expiration' and 'Description'. At the bottom right are 'OK' and 'Cancel' buttons.

6. Click **OK**.
7. Within the **Local Users** tab, choose a user name, then select **Enable** to activate the user or **Disable** to deactivate the user.

**NOTE**

You can enable or disable only one user at a time.

You can click the Settings icon (  ) to apply filters to view the list of local users.

**NOTE**

You can also edit, clone, and delete local users by selecting the **Configure**, **Clone**, and **Delete** options respectively, from the **Local Users** tab.

## Subscription Package

A subscription package defines the characteristics of a subscription that has been created for a registered user. These characteristics include the expiration date and value of the subscription.

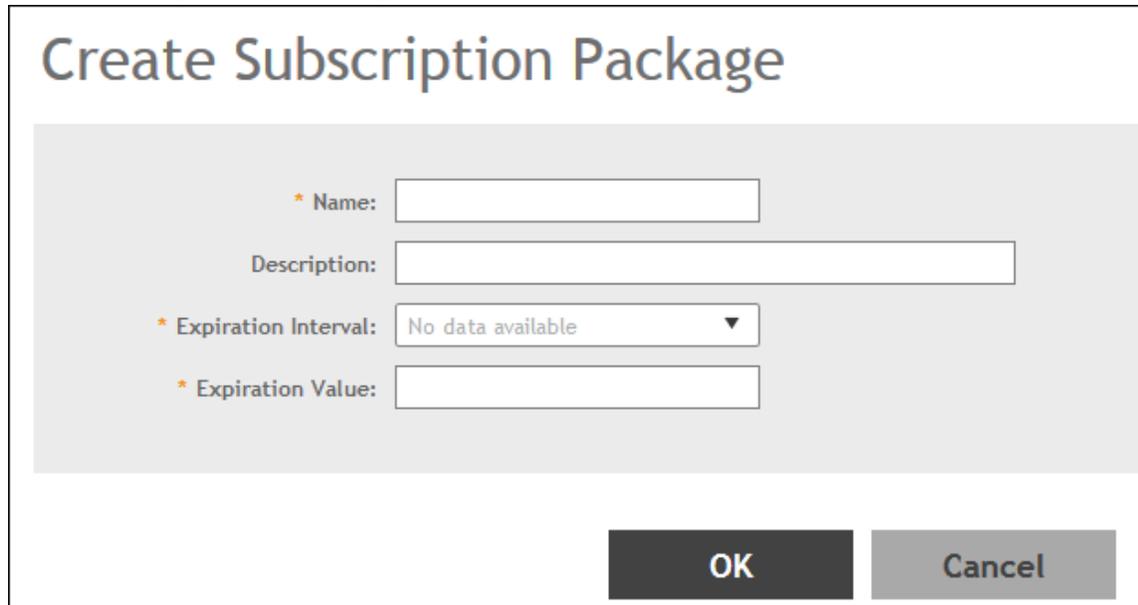
If the user is connected at the time the subscription expires, the user is disconnected from the AP and any attempts to re-authenticate will fail.

1. From the main menu, click **Security > Access Control > Users & Roles > Subscription Package** to display the **Subscription Package** tab.

2. Click **Create**.

The **Create Subscription Package** page is displayed.

FIGURE 9 Creating Subscription Package for the User



3. Complete the following fields:

- **Name:** Enter the subscription package name.
- **Description:** Enter an appropriate description for the new package.
- **Expiration Interval:** Select the expiration time for the package from the list; options include **Hour**, **Day**, **Week**, **Month**, **Year**, and **Never**.
- **Expiration Value:** Enter the expiration value, the **Expiration Interval** has been set to **Hour**, **Day**, **Week**, **Month**, or **Year**.

4. Click **OK**.

**NOTE**

You can also edit and delete a subscription package by selecting the **Configure** and **Delete** options respectively, from the **Subscription Package** tab.

## Limitations When Applying Role Policies to Users

You must be aware of some limitations when applying roles to a user.

### For SZ100 and vSZ-E

- The user role policies are supported only in proxy-mode AAA WLANs. Within AAA profiles, you have the ability to configure the mapping of user attributes to roles.
- It's important to note that certain components may not function as expected in version 3.5, despite the indications provided by the GUI.
- Precedence policies can only be configured at the WLAN level, which may restrict the flexibility in role allocation.

## Users and Roles

### Limitations When Applying Role Policies to Users

- Additionally, it's crucial to differentiate between assigning User Equipments (UEs) to roles through RADIUS and utilizing RADIUS attributes to implement specific policies, such as rate limiting, VLAN assignment, or ACLs.
- The RADIUS attribute always takes precedence over role assignments, potentially limiting the control over role-based access management.

## For SZ300 and vSZ-H

- The user role policies are supported only in proxy-mode AAA WLANs, where the proxy AAA method is used for authentication. If the authentication method is non-proxy AAA, where the AP authenticates the user, the User Equipment (UE) cannot be determined. Therefore, user role policies are not supported on non-proxy mode AAA WLANs.
- Typically, the RADIUS and AAA servers return a user attribute to the controller, and the controller assigns it to an UE. However, you must establish a mapping between the user attribute and the user role so that the user role policy can be applied to the UE. The attribute-to-role mapping is configured within the AAA policy.
- The user traffic profiles are configured with various policies (such as rate limiting), so when a profile is applied to a WLAN, the policies in the profile are applied to all the UEs in the WLAN. The policies can also be applied to a user role in a WLAN, but not all the policies defined in the profile are applied to the role.

If a role-based VLAN policy is defined in the profile, it cannot be applied to the WLAN if it is authenticated based on a Layer 7 method (WebAuth or Hotspot/WISPr). When a VLAN is applied on a per-role basis for a Layer 7 authentication method, you receive an IP address by way of DHCP before the UE is authenticated. As this happens at Layer 3 or Layer 4, you cannot authenticate the UE and assign a role to it until Layer 7 is reached. This results in a mismatch between the VLAN IDs set within the roles, and could possibly lead to service disruptions.

- Precedence profiles are configured at the WLAN level, but they influence how roles are allocated. The manner in which the profile is defined indicates the order in which policies defined within the profile are assigned. The order of priorities can be customized. For example, if you have WLAN 5 configured with VLAN ID 5, an OS policy configured with an iOS VLAN ID 10, and a role policy assigned to a student with VLAN ID 40, then there are multiple orders one can set when a student user with iOS connects to WLAN 5.
- You can assign a UE to a role through RADIUS, or you can use RADIUS attributes to apply policies. However, using RADIUS attributes takes precedence over assigning UEs to a role (though it is easy to configure, because the only element required to authenticate the UE is the role information).

In the RADIUS attributes method, each policy (such a rate limiting or user traffic profile) has a unique RADIUS attribute. Therefore, specifying the RADIUS attribute for a policy overrides all other forms of the controller policy. For example, if a UE is already assigned to VLAN 7 through RADIUS, setting a RADIUS attribute for VLAN IDs to 9 will override all VLAN 7 configurations in WLANs, OS policies, role policies, and so on.



© 2024 CommScope, Inc. All rights reserved.  
350 West Java Dr., Sunnyvale, CA 94089 USA  
<https://www.commscope.com>