

# RUCKUS One Online Help

## (index.html)



## Creating a Network That Uses a Passphrase (PSK/SAE)

You can create a network that requires users to enter a Passphrase (PSK/SAE).

Complete the following steps to create a Passphrase (PSK/SAE)-protected network.

1. On the navigation bar, click Wi-Fi > (and then) Wi-Fi Networks > (and then) Wi-Fi Networks List.  
The Networks page is displayed.

### Wireless Networks Page

Name	Description	Type	Venues	APs	Clients	VLAN
0test		Open Network	0	0	0	VLAN-1
	Access Points	Wi-Fi Networks				
	Access Point List	Wi-Fi Networks List				
	Access Point Report	WLANs Report				
	Airtime Utilization Report	Applications Report				
		Wireless Report				
1.1062AAA		Enterprise AAA (802.1X)	0	0	0	VLAN-1
1.4A-guest		Captive Portal - Managed Guest Pass	0	0	0	VLAN-1
1.4A-4		Enterprise AAA (802.1X)	1	4	0	VLAN-1

2. Click Add Wi-Fi Network. Alternatively, select a Passphrase (PSK/SAE) network setting that you want to copy and click Clone at the top of the table.

The Create New Network page is displayed.

### Create New Network Page

Wi-Fi / Wi-Fi Networks / Network List /

## Create New Network

● Network Details

○ Settings

○ Venues

○ Summary

### Network Details

Network Name \* [?](#)

[Set different SSID](#)

Description

Network Type \*

☒ **Passphrase (PSK/SAE)**  
Require users to enter a passphrase (that you have defined for the network) to connect

☐ **Dynamic Pre-Shared Key (DPSK)**  
Require users to enter a passphrase to connect. The passphrase is unique per device

☐ **Enterprise AAA (802.1X)**  
Use 802.1X standard and WPA2 security protocols to authenticate users using an authentication server on the network

☐ **Hotspot 2.0 Access**  
Hotspot 2.0 (Passpoint) provides seamless Wi-Fi with enhanced security and roaming capabilities

☐ **Captive Portal**

My network

Data: Local-Breakout

Cancel

Next

3. Complete the following settings in the Network Details page.

- Network Name: Enter a name (up to 32 characters) that you want assign to the network.
- Set different SSID: Use this option to configure the SSID different from the network name.
- Description: Enter a description (up to 64 characters) to help you identify the network using.
- Network Type: Select Passphrase (PSK/SAE).

When the network type is selected, a structure diagram of a Passphrase (PSK/SAE) type of network displays.

4. Click Next.

The Settings page is displayed.

Settings Page

## Settings

Passphrase \*

8 characters minimum

Security Protocol

WPA2 (Recommended) ▼

WPA2 is strong Wi-Fi security that is widely available on all mobile devices manufactured after 2006. WPA2 should be selected unless you have a specific reason to choose otherwise. ⓘ 6GHz radios are only supported with WPA3.

Management Frame Protection (802.11w) ⓘ

Disabled ▼

MAC Authentication ⓘ ☒

☒ MAC Registration List  
☐ External MAC Auth

Select MAC Registration List

Select... ▼

Add

[Show more settings](#)

5. Complete the settings on the Settings page.

- Passphrase: Enter a passphrase minimum eight characters that you want users to provide before they can access the network.
- WPA3 SAE Passphrase: Enter a WPA3 SAE passphrase minimum eight characters that you want users to provide before they can access the network.
- Security Protocol: Select the security protocol that you want this network to use. The default security protocol is WPA2, Other options include WPA2, WPA3, WPA2/WPA3 mixed mode, WPA, and WEP. The 6 GHz radios are supported with WPA3 only and 11ax, Wi-Fi 6E and Wi-Fi 7 only support WPA3.

- WPA2 (Recommended) is strong Wi-Fi security that is widely available on all mobile devices manufactured after 2006. WPA2 should be selected unless you have a specific reason to choose otherwise.
- WPA3 is the highest level of Wi-Fi security available but is supported only by devices manufactured after 2019.
- WPA2/WPA3 mixed mode supports the high-end WPA3, which is the highest level of Wi-Fi security available and WPA2 which is still common and still provides good security. In general, mobile devices manufactured after 2006 support WPA2 and devices manufactured after 2019 support WPA3.
- WPA security can be configured if you have older devices that do not support WPA2. These devices were manufactured before 2006. RUCKUS recommends that you upgrade or replace the older devices. 6 GHz radios are supported with WPA3 only.
- WEP: RUCKUS does not recommend using WEP to secure your wireless network because it might be insecure and could be exploited easily. RUCKUS One offers WEP to enable customers with old devices (that are difficult or expensive to replace) to continue using those devices to connect to the wireless network. If you must use WEP, do not use the devices using WEP to transmit sensitive information over the wireless network. 6 GHz radios are supported with WPA3 only.
- Management Frame Protection (802.11w): Select Disabled, Optional, or Required.
- MAC Authentication: Toggle the switch to ON to enable this feature and select one from the following options: MAC Authentication List or External MAC Auth.

Note: MAC Authentication provides an additional level of security for corporate networks. Client MAC addresses are passed to the configured RADIUS servers for authentication and accounting. You cannot modify previously configured MAC authentication settings. To accommodate any modifications, you must create new MAC authentication settings.

Note: Regardless of whether MAC authentication is configured using MAC Registration List or External MAC Auth, the Dynamic VLAN setting will be automatically enabled. You will find the Dynamic VLAN option under the VLAN sub-tab when you click Show more settings.

Note: If you configured MAC Registration List, you will also have to configure a new Identity profile (refer to *Adding an Identity (GUID-12CB0293-3EB3-42D6-A099-1DBE817C0D34.html)*) and associate it with a client device (refer to *Adding a Device to an Identity (GUID-C5FC7A1E-37C8-433C-87E9-56181161B24D.html)*).

- MAC Registration List: Select the MAC registration from the drop-down list or add a new MAC registration.
  - Click Add to add a new MAC registration. The Add MAC Registration List dialog box is displayed. Complete the following fields.

Add MAC Registration List Dialog Box

## Add MAC Registration List

Name \*

List Expiration \*

☒ Never expires

☐ By date

☐ After...

Automatically clean expired entries

☒

Identity Group \*

Select ...

▼

Add

Use Single Identity for all connections

☐

Adaptive Policy Set

Select ...

▼

Add

Apply

Cancel

- Name: Enter a name for the MAC registration list.
- List Expiration: Select one option from the following:
  - Never expires: This license do not have an expiry date.
  - Date: Select date, month, and year. This license expire after the selected date.
  - After: Select a number from the drop-down list and select a duration of license expiration in Hours, Days, Weeks, Months, and Years. This license expire after the selected duration.
- Automatically clean expired entries: Toggle switch to ON to enable this feature.
- Adaptive Policy Set: Select an access policy set from the drop-down list or add a new access policy set.
  - Click Add Access Policy Set to add a new access policy set. Refer to *Creating an Adaptive Policy* ([GUID-2B2C6C55-6C24-4EFE-8F2F-0C4B230D9C4A.html](#)).

- Default Access: Select ACCEPT or REJECT.
- Click Apply.
- External MAC Auth: Select the external MAC authentication and complete the following fields:
  - MAC Address Format: Select a MAC address format from the drop-down list.
  - Authentication Service: Select a RADIUS authentication server from the drop-down list or add a new RADIUS authentication server.
    - Click Add Server to add a new RADIUS authentication server. Refer to *Creating a Radius Server Profile (GUID-F0DFD674-D2E0-42F8-AA09-CBCBE9E419BF.html)*.
  - Accounting Service: Toggle switch to ON to enable the accounting service. Select a RADIUS accounting server from the drop-down list or add a new RADIUS accounting server.
    - Click Add Server to add a new RADIUS authentication server. Refer to *Creating a Radius Server Profile (GUID-F0DFD674-D2E0-42F8-AA09-CBCBE9E419BF.html)*.

- Identity Group

Note:

- When an identity group is selected, all devices joining the network will automatically become an identity within that group, as displayed on the Identity Group page.
  - Users have the option to either select an existing identity group from the list or create a new one.
  - Upon selecting an identity group, users can enable the Use single identity association to all onboarded devices option and subsequently choose a specific identity for association.
  - If a single identity is associated, all devices joining the network will be linked to that designated identity within the selected identity group.
  - During network editing, the initially selected identity group cannot be removed; however, it can be changed to a different identity group.
  - The identity configuration section is not applicable to the MAC Registration List when MAC Authentication is enabled.
- a. Select an identity group from the drop-down or click Add to add an identity group. Refer to *Adding an Identity Group (GUID-60E97713-D793-4659-86BF-94F8BF209EA6.html)* for instructions on how to add an identity group.
  - b. To view details about the identity group, click View Details. The Identity Group sidebar is displayed.
  - c. (Optional) Click the toggle to enable the Use single identity association to all onboarded devices option. The Identity section is displayed. If this option is selected, all devices that connect to this network are associated with this identity. If this option is not enabled, an identity for each connected device is created under the identity group.

Configuring an Identity Group for PSK/SAE Network

**Settings**

Network Details  
**Settings**  
Venues  
Summary

Passphrase \*

8 characters minimum

Security Protocol

WPA2 (Recommended)

WPA2 is strong Wi-Fi security that is widely available on all mobile devices manufactured after 2006. WPA2 should be selected unless you have a specific reason to choose otherwise. ① 6GHz radios are only supported with WPA3.

Management Frame Protection (802.11w) ②

Disabled

MAC Authentication ②

Identity Group

0407PSK-1 View Details | Add

Use single identity association to all onboarded devices

Identity

Associate Identity

Cancel Back Next

- d. Click Associate Identity to access the Associate Identity sidebar and select an identity to associate with the identity group, and then click Add.
- e. (Optional) Click Add Identity to access the Create Identity sidebar to add an identity. Refer to *Adding an Identity* (GUID-12CB0293-3EB3-42D6-A099-1DBE817C0D34.html) for instructions on how to add an identity.

6. Click Show more settings.

By default, the VLAN sub-tab is displayed. Each sub-tab includes additional Wi-Fi configuration options to configure the settings of your preference. Refer to *Configuring Additional Settings for a Wi-Fi Network* (GUID-8AE1D265-5C9B-4B71-9A5C-A57C3CFA586A.html) to configure each of the available settings.

Note:

Demonstration of Advanced Settings for a Wi-Fi Network. This video explains advanced settings for a Wi-Fi network and walks you through the process of configuring them.

*Click to play video in full screen mode. (<https://play.vidyard.com/Jm3S4CCwJX2Z2N8E9qAZdJ>)*

7. Click Next.

The Venues page is displayed.

Venues Page

Venues

Select venues to activate this network

<input type="checkbox"/>	Venue	City	Country	Networks	Wi-Fi APs	Activated	APs	Radios
<input type="checkbox"/>	1.space MM ^&*\$ MM	Sunnyvale, California	United States		0	<input type="checkbox"/>		
<input type="checkbox"/>	111sample	Sunnyvale, California	United States	7	3	<input type="checkbox"/>		
<input type="checkbox"/>	1movemlisaswitch	Sunnyvale, California	United States		0	<input type="checkbox"/>		
<input type="checkbox"/>	2-AI-Analytics	San Francisco, California	United States	1	1	<input type="checkbox"/>		
<input type="checkbox"/>	2-OTA-ACX-26360	Sunnyvale, California	United States		0	<input type="checkbox"/>		

8. Complete the following steps to configure a venue:

a. Select the venues in which you want to activate this network:

- To activate the network in all of your venues, select the check box beside Venue at the top of the table and click Activate.
- To activate the network in a specific venue, locate the venue from the list, and set the switch to ON in the



Activated column.

The APs, Radio, and Scheduling of the selected venue is displayed in the table.

### Selecting Venues

Venues

Select venues to activate this network

2 selected

Activate

Deactivate

<div></div>	Venue	City	Country	Networks	Wi-Fi APs	Activated	APs	Radios	Scheduling
<div><div></div></div>	1.space MM ^&*&%\$ MM	Sunnyvale, California	United States		0	<div><div></div></div>	All APs	2.4 GHz, 5 GHz	24/7 <div><div></div></div>
<div><div></div></div>	111sample	Sunnyvale, California	United States	7	2	<div><div></div></div>	All APs	2.4 GHz, 5 GHz	24/7 <div><div></div></div>

b. By default, this network configuration is applicable for all APs and all radio bands supported by the APs. To select specific AP groups or modify the radio bands that will broadcast this network, complete one of the following steps:

- 1) Click All APs in the APs column. The Select APs dialog box is displayed. Select All APs to activate this network on all current and future APs at this venue. You can also choose to remove or add any AP-supported radio bands in the Radio Band drop-down list giving you the flexibility of broadcasting this network only on the selected radio bands.

### Selecting the APs

## Select APs

×

Define how this network will be activated on venue "My Venue"

☒ All APs  
Including any AP that will be added to this venue in the future.

VLAN: VLAN-1 (Default)

★ Radio Band: 2.4 GHz ✕ 5 GHz ✕ ▼

☐ Select specific AP groups  
Including any AP that will be added to a selected AP group in the future.

Cancel Apply

- 2) Click Select specific AP groups to activate this network on specific AP groups including any AP that is added to selected AP groups in the future. The APs not assigned to any group option is displayed. After APs not assigned to any group is selected, VLAN and Radio Band options are displayed:

### Selecting Specific AP Groups

**Select APs**

Define how this network will be activated on venue "My Venue"

☐ All APs  
Including any AP that will be added to this venue in the future.

☒ Select specific AP groups  
Including any AP that will be added to a selected AP group in the future.

	VLAN	Radio Band
<input type="checkbox"/> APs not assigned to any group		
<input checked="" type="checkbox"/> AP Group 1	VLAN-1 (Default) <a href="#">✎</a>	2.4 GHz X 5 GHz X
<input type="checkbox"/> AP Group 2		

[Cancel](#) [Apply](#)

- 3) In the VLAN option, by default VLAN-1 is selected. Click the [✎](#) icon and configure the VLAN or VLAN pool for the selected AP group.
- 4) In the Radio Band option, remove or add any AP-supported radio bands in the drop-down list for the selected AP group.
- 5) Click Apply.

h. By default, this network configuration is scheduled for 24/7. To configure the Scheduling, complete the following steps:

- 1) Click 24/7 in the Scheduling column. The Schedule for Network <network-name> in Venue <venue-name> dialog box is displayed. Alternatively, you may follow the remaining sub-steps to customize the schedule.

#### Schedule for Network Dialog Box

**Schedule for Network "TEST-1" in Venue "1.space MM ^&\*\$ MM"**

Network availability

☐ 24/7

☒ Custom Schedule

Mark/ unmark areas to change network availability [See tips](#)

Venue time zone: UTC -07:00 (Pacific Daylight Time)

	Midnight	2 AM	4 AM	6 AM	8 AM	10 AM	Noon	2 PM	4 PM	6 PM	8 PM	10 PM	Midnight
<input checked="" type="checkbox"/> Mon													
<input checked="" type="checkbox"/> Tue													
<input checked="" type="checkbox"/> Wed													
<input checked="" type="checkbox"/> Thu													

[Cancel](#) [Apply](#)

- 2) Click Custom Schedule.
  - 3) Network schedule is customized as per your requirement. You can configure the schedule for Monday through Sunday and from midnight to midnight (from 00:00 hours through 23.59 hours). For more information, click See tips. The Network Scheduler Tips dialog box opens, displaying different configuration tips in the form of animated GIFs.
  - 4) Click OK to close the Network Scheduler Tips dialog box.
  - 5) Click Apply.
- n. The Network Tunneling column shows the tunneling service associated with each active network. Click the toggle to enable tunneling and select a Network Topology tunnel type from the drop-down list. Selecting SoftGRE allows you to select a SoftGRE profile and optionally enable and configure IPsec (refer to *Creating a SoftGRE Profile (GUID-B99FD990-42CF-4297-AAA5-CB91A6691500.html)* and *Creating a IPsec Profile (GUID-DB6BFE03-4FAC-4E1B-B80D-DC08B316FA32.html)*). Click Add to save and apply your changes. The SD-LAN option is available only in networks containing RUCKUS Edge devices.

#### Selecting a Tunneling Service

**Tunnel: My-Venue** [X]

Define how this network traffic will be tunneled at venue.

Network Topology \*

SoftGRE

Tunnel the traffic to a SoftGRE gateway

**A venue supports up to 3 SoftGRE activated profiles without IPsec or 1 SoftGRE with IPsec.**

SoftGRE Profile \*

Select... Profile details Add

Enable IPsec ☒

IPsec Profile \*

Select... Profile details Add

Cancel Add

9. Click Next.

Example: The Summary page is displayed.

10. Review the settings that you configured. To display the passphrase in plain text, click the  icon.

11. Click Finish.

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