Key Chain Creation on SG500X Stackable Switches

Objective

Key chains consist of multiple keys that have a lifetime associated with them. The lifetime allows automatic change of passwords/keys so that the administrator does not have to change the password in all the devices manually. Key chains are useful to authorize network connections between devices. Key chains are used with the Routing Information Protocol (RIPv2).

This article explains how to create a Key Chain on the SG500X Series Stackable Switches.
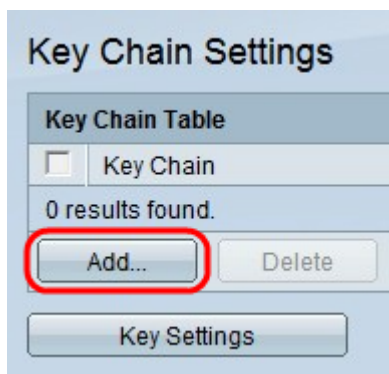
Applicable Devices

• SG500X Series Stackable Switches

Software Version

• 1.3.0.62

Key Chain Settings

Step 1. Log in to the web configuration utility on the switch, and choose **Security > Key Management > Key Chain Settings**. The *Key Chain Settings* page opens:

Step 2. Click **Add** to add a new key chain. The *Add Key Chain* window appears.

✱ Key Chain:	Key Chain 1	(11/32 Characters Used)	

✱ Key Identifier:		(Range: 1 - 255)	
Key String:		(0/16 Characters Used)	
Accept Life Time:	● Always Valid		
	○ User Defined		
✱ Start Date:		YYYY-MMM-DD	
✱ Start Time:		HH:MM:SS	
End Time:	◉ Infinite		
	○ Duration		
✱ Duration:	[ ] Days [ ] Hours [ ] Minutes [ ] Seconds	(1 Sec. - 24000 Days)	
Send Life-Time:	● Always Valid		
	○ User Defined		
✱ Start Date:		YYYY-MMM-DD	
✱ Start Time:		HH:MM:SS	
End Time:	◉ Infinite		
	○ Duration		
✱ Duration:	[ ] Days [ ] Hours [ ] Minutes [ ] Seconds	(1 Sec. - 24000 Days)	

Apply   Close

Step 3. Enter a name for the key chain in the Key Chain field.

| Key Chain: | Key Chain 1 | (11/32 Characters Used) |

Key Identifier:	1	(Range: 1 - 255)
Key String:		(0/16 Characters Used)
Accept Life Time:	● Always Valid
	○ User Defined
Start Date:		YYYY-MMM-DD
Start Time:		HH:MM:SS
End Time:	● Infinite
	○ Duration
Duration:	Days	Hours	Minutes	Seconds	(1 Sec. - 24000 Days)
Send Life-Time:	● Always Valid
	○ User Defined
Start Date:		YYYY-MMM-DD
Start Time:		HH:MM:SS
End Time:	● Infinite
	○ Duration
Duration:	Days	Hours	Minutes	Seconds	(1 Sec. - 24000 Days)

Apply   Close

Step 4. Enter a value to identify the key in the Key Identifier field.

| Key Chain: | Key Chain 1 | (11/32 Characters Used) |

Key Identifier:	1	(Range: 1 - 255)
Key String:	string1	(7/16 Characters Used)
Accept Life Time:	● Always Valid
	○ User Defined
✿ Start Date:		YYYY-MMM-DD
✿ Start Time:		HH:MM:SS
End Time:	● Infinite
	○ Duration
✿ Duration:	Days Hours Minutes Seconds (1 Sec. - 24000 Days)
Send Life-Time:	● Always Valid
	○ User Defined
✿ Start Date:		YYYY-MMM-DD
✿ Start Time:		HH:MM:SS
End Time:	● Infinite
	○ Duration
✿ Duration:	Days Hours Minutes Seconds (1 Sec. - 24000 Days)

[Apply] [Close]

Step 5. Enter a string in the Key String field. This string acts as a passcode. If another device has the same key string the devices are allowed to exchange information.

Step 6. Click the radio button that corresponds with the desired acceptance life-time and the desired send life-time in the Accept Life-Time and Send Life-Time fields respectively. The acceptance life-time is how long the key-identifier is valid to receive packets. The send life time is how long the key-identifier is valid to send packets.

• Always Valid — There is no limit to the life-time of the key-identifier. The key is always valid.

• User Defined — The life of the key is limited.

Step 7. If the User Defined radio button is clicked in the Accept Life-Time field, enter these values in the fields immediately below the Accept Life-Time field. If the User Defined radio button is clicked in the Send Life-Time field enter these values in the fields immediately below the Send Life-Time field.

• Start Date — This is the earliest date that the key-identifier is valid. The format is Year-Month-Day (YYYY-MMM-DD).

• Start Time — This is the earliest time that the key-identifier is valid. The format is HH:MM:SS (Hour:Minute:Second).

✻ Key Chain:	Key Chain 1	(11/32 Characters Used)
✻ Key Identifier:	1	(Range: 1 - 255)
Key String:	string1	(7/16 Characters Used)
Accept Life Time:	○ Always Valid ⦿ User Defined	
✻ Start Date:	2012-Mar-28	YYYY-MMM-DD
✻ Start Time:	09:45:30	HH:MM:SS
End Time:	⦿ Infinite ○ Duration	
✻ Duration:	[ ] Days [ ] Hours [ ] Minutes [ ] Seconds	(1 Sec. - 24000 Days)
Send Life-Time:	○ Always Valid ⦿ User Defined	
✻ Start Date:	2012-Mar-28	YYYY-MMM-DD
✻ Start Time:	09:45:30	HH:MM:SS
End Time:	⦿ Infinite ○ Duration	
✻ Duration:	[ ] Days [ ] Hours [ ] Minutes [ ] Seconds	(1 Sec. - 24000 Days)

[Apply] [Close]

Step 8. Click the radio button that corresponds with the desired End Time under the Accept Life-Time field. Click the radio button that corresponds with the desired End Time under the Send Life-Time field.

• Infinite — There is no limit to the life-time of the key-identifier. The key has no end time.

• Duration — There is a limit to the life-time of the key-identifier.

Step 9. If the Duration radio button is clicked in the End Time field under the Accept Life-Time field, enter the length of time the key-identifier is valid in corresponding the Days, Hours, Minutes, and Seconds fields. If the Duration radio button is clicked in the End Time field under the Send Life-Time field enter the length of time the key-identifier is valid in the corresponding Days, Hours, Minutes, and Seconds fields.

Note: The Days, Hours, Minutes, and Seconds fields must be filled out. An empty space is invalid.

Step 10. Click **Apply** to save the configuration.

Step 11. (Optional) To add another key to the same key chain, click **Add** and repeat Steps 3 to Step 10 with the same value in the Key Chain field in Step 3.

Key Chain Settings

	Key Chain Table
☐	Key Chain
☐	Key Chain 1

[Add...] [Delete]
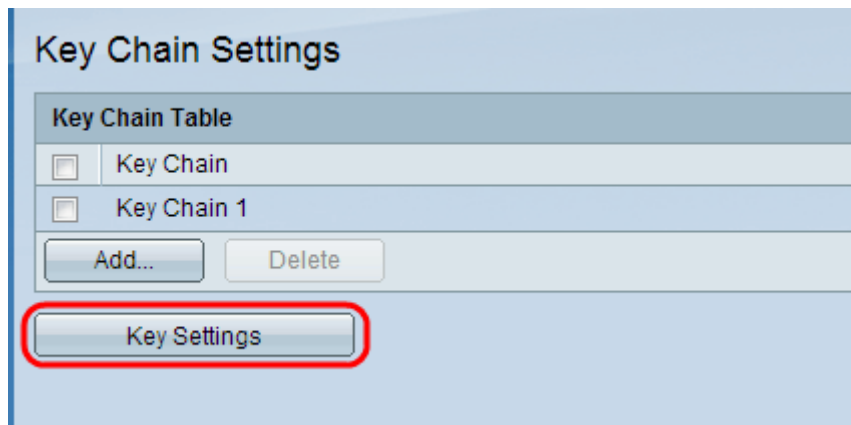
[Key Settings]

Step 12. (Optional) To view the keys associated with a particular key chain, click **Key Settings** in the *Key Chain Settings* page**.**