

# Session Initiation Protocol (SIP) Timer Values Configuration on SPA8000

## Objective

Session Initiation Protocol (SIP) is used to control voice and video sessions over an IP network. SIP controls things like video conferencing, voice over IP, and instant messaging. It is used in communication sessions for devices such as videos and voice calls. Configuration of SIP timers enables you to improve the interoperability and performance of devices in the network environment. This document explains how to configure SIP timer values on a SPA8000.

## Applicable Device

- SPA8000

## Software Version

- 6.1.12

## SIP Timer Values

Step 1. Log in to the web configuration utility as an administrator and choose **Advanced > Voice > SIP**. The *SIP* page opens:

<b>SIP Parameters</b>			
Max Forward:	70	Max Redirection:	5
Max Auth:	2	SIP User Agent Name:	\$VERSION
SIP Server Name:	\$VERSION	SIP Reg User Agent Name:	
SIP Accept Language:		DTMF Relay MIME Type:	application/dtmf-relay
Hook Flash MIME Type:	application/hook-flash	Remove Last Reg:	no
Use Compact Header:	no	Escape Display Name:	no
RFC 2543 Call Hold:	yes	Mark All AVT Packets:	yes
SIP TCP Port Min:	5060	SIP TCP Port Max:	5080
SIP TCP Port Min Mod2:	5160	SIP TCP Port Max Mod2:	5180
SIP TCP Port Min Mod3:	5260	SIP TCP Port Max Mod3:	5280
SIP TCP Port Min Mod4:	5360	SIP TCP Port Max Mod4:	5380
<b>SIP Timer Values (sec)</b>			
SIP T1:	.5	SIP T2:	4
SIP T4:	5	SIP Timer B:	32
SIP Timer F:	32	SIP Timer H:	32
SIP Timer D:	32	SIP Timer J:	32
INVITE Expires:	240	ReINVITE Expires:	30
Reg Min Expires:	1	Reg Max Expires:	7200
Reg Retry Intvl:	30	Reg Retry Long Intvl:	1200
Reg Retry Random Delay:		Reg Retry Long Random Delay:	
Reg Retry Intvl Cap:			
<b>Response Status Code Handling</b>			
SIT1 RSC:		SIT2 RSC:	
SIT3 RSC:		SIT4 RSC:	
Try Backup RSC:		Retry Reg RSC:	

Step 2. In the SIP T1 field, enter the maximum value before the device retransmits in order to estimate the RTT (Round trip time) between client and server. The range is from 0 to 64

seconds. The default value is 0.5 seconds.

Step 3. In the SIP T2 field, enter the the maximum retransmit interval for non-INVITE requests and INVITE responses. This value should range from 0 to 64 seconds. The default value is 4 seconds.

Step 4. In the SIP T4 field, enter the maximum duration a message remains in the network. This value ranges from 0 to 64 seconds. The default value is 5 seconds.

Step 5. In the SIP Timer B field, enter the INVITE transaction timeout timer. This value ranges from 0 to 64 seconds. The default value is 32 seconds.

Step 6. In the SIP Timer F field, enter the non-INVITE transaction timeout timer. This value ranges from 0 to 64 seconds. The default value is 32 seconds.

Step 7. In the SIP Timer H field, enter the wait time for ACK receipt timer. This value ranges from 0 to 64 seconds. The default value is 32 seconds.

Step 8. In the SIP Timer D field, enter the ACK hang-around time. This value ranges from 0 to 64 seconds. The default value is 32 seconds.

Step 9. In the SIP Timer J field, enter the wait time for non-INVITE request retransmits. This value ranges from 0 to 64. The default value is 32 seconds.

Step 10. In the INVITE Expires field, enter the time it takes the INVITE to request Expire header value. If you enter 0 in this field, then the expire header is not included in the request. The default is 240.

Step 11. In the ReINVITE Expires field, enter the time it takes the ReINVITE to request Expire header value. If you enter 0 in this field then the expire header is not included in the request. The default is 240.

Step 12. In the Reg Min Expires field, enter the minimum registration expiration time. The Min-Expires header field conveys the minimum refresh interval supported for the Contact header or the Expires header field that is stored by a registrar. The default value is 1 second.

Step 13. In the Reg Max Expires field, enter the maximum registration expiration time. The Max-Expires header field conveys the maximum refresh interval supported for Contact header or Expires header field that is stored by a registrar. The default value is 7200 seconds.

Step 14. In the Reg Retry Intvl field, enter the interval to wait (in seconds) before the adapter retries registration after last registration failure. The default value is 30 seconds.

Step 15. In the Reg Retry Long Intvl field, enter the value which should be much larger than Reg Retry Intvl. If registration fails because the SIP response code does not match, then the device will wait for a specified length of time before it retries. The default value is 1200 seconds.

Step 16. In the Reg Retry Random Delay field, enter the delay range (in seconds) from which a number is randomly chosen to add to Register Retry Intvl when you retry REGISTER after a failure. The default value is 0, which means this feature is disabled.

Step 17. In the Reg Retry Long Random Delay field, enter the delay range (in seconds) from which a number is randomly chosen to add to Register Retry Long Intvl when you retry

REGISTER after a failure. The default value is 0, which means this feature is disabled.

Step 18. In the Reg Retry Intvl Cap field enter **0** unless you wish to enable the Register Retry Interval Cap, which adds the inputted value to the Register Retry Random Delay.

Step 19. Click **Submit All Changes** to save the configuration.