

Proxy and Registration Advanced Settings on SPA8000 Phone Adapter

Objective

Session Initiation Protocol (SIP) is a protocol that helps to control multimedia communications over the internet. This protocol allows the users to send packets that consist of more than one stream. Applications and programs like video conferencing, instant message, and media streaming have packets that consist of more than one stream. SIP Registration Proxy feature provides support for sending outbound registrations based on incoming registrations. This feature also enables direct registration of SIP endpoints with the SIP registrar. This feature is useful for the administrator because it provides security to the network. This article explains how to configure advanced SIP proxy and registration feature on the SPA8000 phone adapter.

Note: If you want to configure the basic proxy and registration please follow the steps mentioned in the article *SIP Proxy and Registration Basic Settings on SPA8000*.

Applicable Device

- SPA8000

Software Version

- 6.1.12

Proxy and Registration Advanced Settings

Step 1. Log in to the web configuration utility as an administrator and choose **Advanced > Voice > L1-L8** The Line page opens:



The screenshot shows the web configuration utility interface for the SPA8000 phone adapter. The 'Voice' tab is selected, and the 'L1' line configuration page is displayed. The interface includes a navigation menu at the top with options like 'Network', 'Voice', 'Info', 'System', 'SIP', 'Provisioning', 'Regional', and 'L1-L8'. The 'L1' line configuration page contains several sections:

- Line Enable:** A dropdown menu set to 'yes'.
- Trunk Group:** A dropdown menu set to 'none'.
- Streaming Audio Server (SAS):** A section with 'SAS Enable' set to 'no' and 'SAS DLG Refresh Intvl' set to '30'.
- NAT Settings:** A section with 'NAT Mapping Enable' set to 'no', 'NAT Keep Alive Enable' set to 'no', 'NAT Keep Alive Msg' set to '\$NOTIFY', and 'NAT Keep Alive Dest' set to '\$PROXY'.
- Network Settings:** A section with 'SIP ToS/DiffServ Value' set to '0x68', 'SIP CoS Value' set to '3', 'RTP ToS/DiffServ Value' set to '0xb8', 'RTP CoS Value' set to '6', and 'Network Jitter Level' set to 'high'.

Step 2. From Line Enable drop-down list choose **yes** to enable the line for service.

Step 3. Scroll down to the Proxy and Registration area.

Step 4. Enter your Proxy server address in the proxy field for all outbound request.

Step 5. Enter the proxy outbound address where all outbound request are sent in the Outbound Proxy field.

Step 6. From the Use Outbound Proxy drop-down list, choose **yes** to enable the use of Outbound Proxy. If set to **no**, the Outbound Proxy parameter and Use OB Proxy in Dialog parameter are ignored. The default is **no**.

Step 7. From the Use OB Proxy In Dialog drop-down list, choose **yes** to enable the use of OB proxy in dialog. This feature forces SIP requests to be sent to the outbound proxy within a dialog. Ignore if any outbound proxy parameters not set.

Step 8. From the Register drop-down list, choose **yes** to enable periodic registration with the proxy server. This parameter is ignored if proxy is not specified.

Step 9. From the Make Call Without Reg drop-down list, choose **yes** to enable outbound calls without successful registration by the unit.

Step 10. Enter the time that you would like to assign for the registration to be in the device in the Register Expires field. The default value is 3600 seconds. This feature allows answer calls without successful registration by the unit.

Step 11. From the Use DNS SRV drop-down list, choose **yes** to enable the use of DNS SRV. A Service record (SRV record) is a specification of data in the Domain Name System (DNS) that defines the location of a host. The SRV resource record allows administrators to use several servers for a single domain, to move services from host to host. This feature indicates if the SPA should use the proxy as domain as key for the search of host.

Step 12. From the DNS SRV Auto Prefix drop-down list, choose **yes** to enable the use of DNS SRA auto prefix. This feature allows the use of a prefix when looking up a DNS Service record generated by the domain specified in the Proxy field. This is very useful for the user because it eliminates time for searching and assures that the user finds the desired domain.

Step 13. Enter the time that you would like to assign for the delay after which the phone will retry from the highest priority proxy server after it has failed over to a lower priority server in the Proxy Fallback Intvl field. The default is 3600 seconds.

Step 14. Choose the redundancy method that you would like to assign to the proxy from the Proxy Redundancy Method drop-down list. This feature allows the device to make an internal list of proxies in the DNS SRV records. There are two methods of redundancy:

- Normal — It will contain proxies ranked by weight and priority.
- Based on SRV Port — The phone first uses normal and then inspects the port number based on the listed proxy ports on normal.

Step 15. Enter the URL or IP address of a voice mail server that you would like to assign to the voice mail server in the Voice mail Server field. This allows the device to establish a direct connection with the server to access the voice mail. This is useful for the administrator because it generates more control over the messages and provides an increase of security.

Step 16. Enter the time in seconds that you would like to assign for the mailbox subscribe to be in the device in the Mailbox Subscribe Expires. The mail box subscription is the authorization that the user has to access the mail box, this enhances the security and protects the data.

Step 17. Click **Submit All Changes** to save the settings.