

## Grandstream Device Configuration

**STATUS BASIC SETTINGS ADVANCED SETTINGS PROFILE 1 PROFILE 2 FXS PORTS**Profile Active: ☐ No ☒ YesPrimary SIP Server:  (e.g., sip.mycompany.com, or IP address)Failover SIP Server:  (Optional, used when primary server no response)Prefer Primary SIP Server: ☒ No ☐ Yes (yes - will register to Primary Server if Failover registration expires)Outbound Proxy:  (e.g., proxy.myprovider.com, or IP address, if any)Backup Outbound Proxy:  (e.g., proxy.myprovider.com, or IP address, if any)Prefer Primary Outbound Proxy: ☒ No ☐ Yes (yes - will reregister via Primary Outbound Proxy if registration expires)Allow DHCP Option 120 (override SIP server): ☒ No ☐ YesSIP Transport: ☒ UDP ☐ TCP ☐ TLS (default is UDP)SIP URI Scheme When Using TLS: ☐ sip ☒ sipsUse Actual Ephemeral Port in Contact with TCP/TLS: ☒ No ☐ YesNAT Traversal: ☐ No ☒ Keep-Alive ☐ STUN ☐ UPnPDNS Mode: ☒ A Record ☐ SRV ☐ NAPTR/SRVDNS SRV use Registered IP: ☒ No ☐ YesTel URI:  ▼Use Request Routing ID in SIP INVITE Header: ☒ No ☐ YesSIP Registration: ☐ No ☒ YesUnregister On Reboot: ☐ No ☒ YesOutgoing Call without Registration: ☒ No ☐ YesRegister Expiration:  (in minutes. default 1 hour, max 45 days)Reregister before Expiration:  (0-64800. Default 0 second)SIP Registration Failure Retry Wait Time:  (in seconds. Between 1-3600, default is 20)SIP Registration Failure Retry Wait Time upon 403 Forbidden:  (in seconds. Between 0-3600, default is 1200. 0 means stop retry registration upon 403 response.)Enable SIP OPTIONS/NOTIFY Keep Alive: ☐ No ☒ OPTIONS ☐ NOTIFYSIP OPTIONS/NOTIFY Keep Alive Interval:  (in seconds. Between 1-64800, default is 30)SIP OPTIONS/NOTIFY Keep Alive Max Lost:  (Number of max lost packets for SIP OPTIONS/NOTIFY Keep Alive before re-registration. Between 3-10, default is 3)Layer 3 QoS:  SIP DSCP (Diff-Serv value in decimal, 0-63, default 26) RTP DSCP (Diff-Serv value in decimal, 0-63, default 46)Local SIP Port:  (default is 5060 for UDP and TCP; 5061 for TLS)Local RTP Port:  (even number between 1024-65535, default 5004)Use Random SIP Port: ☐ No ☒ YesUse Random RTP Port: ☐ No ☒ YesEnable RTCP: ☐ No ☒ YesHold Target Before Refer: ☐ No ☒ YesRefer-To Use Target Contact: ☒ No ☐ YesTransfer on Conference Hangup: ☐ No ☒ Yes

- Disable Bellcore Style 3-Way Conference:* ☒ No ☐ Yes (Using star code \*23 for 3-way conference)  
*Remove OBP from Route Header:* ☒ No ☐ Yes  
*Support SIP Instance ID:* ☐ No ☒ Yes  
*Validate Incoming SIP Message:* ☒ No ☐ Yes  
*Check SIP User ID for incoming INVITE:* ☒ No ☐ Yes (no direct IP calling if Yes)  
*Authenticate incoming INVITE:* ☒ No ☐ Yes  
*Authenticate server certificate domain:* ☒ No ☐ Yes  
*Authenticate server certificate chain:* ☒ No ☐ Yes

Trusted CA certificates:

- Allow Incoming SIP Messages from SIP Proxy Only:* ☐ No ☒ Yes (no direct IP calling if Yes)  
*Use Privacy Header:* ☒ Default ☐ No ☐ Yes  
*Use P-Preferred-Identity Header:* ☒ Default ☐ No ☐ Yes  
*Use P-Access-Network-Info Header:* ☐ No ☒ Yes  
*Use P-Emergency-Info Header:* ☐ No ☒ Yes  
*SIP REGISTER Contact Header Uses:* ☐ LAN Address ☒ WAN Address  
*Caller ID Fetch Order:* ☒ Auto ☐ Disabled ☐ From Header  
*Allow SIP Factory Reset:* ☒ No ☐ Yes  
*SIP T1 Timeout:*    
*SIP T2 Interval:*    
*SIP Timer D:*  (0 - 64 seconds. Default 0)  
*DTMF Payload Type:*   
*Preferred DTMF method (in listed order):* Priority 1:    
 Priority 2:    
 Priority 3:    
*Inband DTMF Duration:* In 40-2000 milliseconds range, duration:  inter-duration:   
*Disable DTMF Negotiation:* ☒ No (negotiate with peer) ☐ Yes (use above DTMF order without negotiation)  
*Generate Continuous RFC2833 Events:* ☒ No ☐ Yes (RFC2833 events are generated until key is released)  
*Send Hook Flash Event:* ☒ No ☐ Yes (Hook Flash will be sent as a DTMF event if set to Yes)  
*Flash Digit Control:* ☒ No ☐ Yes (Overrides the default settings for call control when both channels are in use.)  
*Enable Call Features:* ☒ No ☐ Yes (if Yes, call features using star codes will be supported locally)  
*Offhook Auto-Dial Delay:*  (0-60 seconds, default is 0)  
*Proxy-Require:*   
*Use NAT IP:*  (used in SIP/SDP message if specified)  
*Use SIP User-Agent Header:*   
*Distinctive Ring Tone:* Ring Tone 1  used if incoming caller ID is   
 Ring Tone 1  used if incoming caller ID is   
 Ring Tone 1  used if incoming caller ID is   
*RFC2543 Hold:* ☐ No ☒ Yes  
*Disable Call-Waiting:* ☒ No ☐ Yes  
*Disable Call-Waiting Caller ID:* ☒ No ☐ Yes

*Disable Call-Waiting Tone:* ☒ No ☐ Yes  
*Disable Connected Line ID:* ☒ No ☐ Yes  
*Disable Receiver Offhook Tone:* ☒ No ☐ Yes (ROH tone will not be played after offhook for 60 seconds)  
*Disable Reminder Ring for On-Hold Call:* ☒ No ☐ Yes  
*Disable Visual MWI:* ☒ No ☐ Yes  
*Visual MWI Type:* ☒ FSK ☐ NEON  
*Do Not Escape '#' as %23 in SIP URI:* ☒ No ☐ Yes  
*Disable Multiple m line in SDP:* ☒ No ☐ Yes  
*Ring Timeout:*  (0-300, default is 60 seconds, 0 means no timeout)  
*Hunting Group Ring Timeout:*  (5-300, default is 20 seconds)  
*Hunting Group Type:* ☒ Circular ☐ Linear  
*Delayed Call Forward Wait Time:*  (Allowed range 1-120, in seconds.)  
*No Key Entry Timeout:*  (1-15, default is 4 seconds)  
*Early Dial:* ☒ No ☐ Yes (use "Yes" only if proxy supports 484 response)  
*Dial Plan Prefix:*  (this prefix string is added to each dialed number)  
*Use # as Dial Key:* ☐ No ☒ Yes (if set to Yes, "#" will function as the "(Re-)Dial" key)  
*Disable # as Redial Key:* ☒ No ☐ Yes (if set to Yes, "#" will not function as ReDial key)  
*Dial Plan:*   
*SUBSCRIBE for MWI:* ☐ No, do not send SUBSCRIBE for Message Waiting Indication  
☒ Yes, send periodical SUBSCRIBE for Message Waiting Indication  
*Send Anonymous:* ☒ No ☐ Yes (caller ID will be blocked if set to Yes)  
*Anonymous Call Rejection:* ☒ No ☐ Yes  
*Special Feature:*    
*Enable Session Timer:* ☐ No ☒ Yes  
*Session Expiration:*  (90-64800, default 180 seconds)  
*Min-SE:*  (90-64800, default 90 seconds)  
*Caller Request Timer:* ☒ No ☐ Yes (Request for timer when making outbound calls)  
*Callee Request Timer:* ☒ No ☐ Yes (When caller supports timer but did not request one)  
*Force Timer:* ☒ No ☐ Yes (Use timer even when remote party does not support)  
*UAC Specify Refresher:* ☐ UAC ☐ UAS ☒ Omit (Recommended)  
*UAS Specify Refresher:* ☒ UAC ☐ UAS (When UAC did not specify refresher tag)  
*Force INVITE:* ☒ No ☐ Yes (Always refresh with INVITE instead of UPDATE)  
*Enable 100rel:* ☒ No ☐ Yes  
*Add Auth Header On Initial REGISTER:* ☒ No ☐ Yes  
*Conference URI:*   
  
*Use First Matching Vocoder in 200OK SDP:* ☒ No ☐ Yes  
*Preferred Vocoder (in listed order):*  
choice 1:   
choice 2:   
choice 3:   
choice 4:   
choice 5:   
choice 6:   
choice 7:   
choice 8:   
  
*Voice Frames per TX:*   
*G723 Rate:* ☒ 6.3kbps encoding rate ☐ 5.3kbps encoding rate

*iLBC Frame Size:* ☒ 20ms ☐ 30ms  
*Disable OPUS Stereo in SDP:* ☒ No ☐ Yes (removes "/2" from offer)  
*iLBC Payload Type:*  (between 96 and 127, default is 97)  
*OPUS Payload Type:*  (between 96 and 127, default is 123)  
*VAD:* ☒ No ☐ Yes  
*Symmetric RTP:* ☒ No ☐ Yes  
*Fax Mode:* ☒ T.38 ☐ Pass-Through  
*Re-INVITE After Fax Tone Detected:* ☒ Enabled ☐ Disabled  
*Jitter Buffer Type:* ☐ Fixed ☒ Adaptive  
*Jitter Buffer Length:* ☐ Low ☒ Medium ☐ High  
*SRTP Mode:* ☒ Disabled ☐ Enabled but not forced ☐ Enabled and forced  
*Crypto Life Time:* ☐ Disabled ☒ Enabled

*SLIC Setting:*    
*Caller ID Scheme:*    
*DTMF Caller ID:* *Start Tone*   *Stop Tone*    
*Disable Unknown Caller ID:* ☒ No ☐ Yes  
*Polarity Reversal:* ☒ No ☐ Yes (reverse polarity upon call establishment and termination)  
*Loop Current Disconnect:* ☒ No ☐ Yes (loop current disconnect upon call termination)  
*Play busy/reorder tone before Loop Current Disconnect:* ☒ No ☐ Yes (play busy/reorder tone before loop current disconnect upon call fail)  
*Loop Current Disconnect Duration:*  (100 - 10000 milliseconds. Default 200 milliseconds)  
*Enable Pulse Dialing:* ☒ No ☐ Yes  
*Enable Hook Flash:* ☐ No ☒ Yes  
*Hook Flash Timing:* In 40-2000 milliseconds range, minimum:  maximum:   
*On Hook Timing:*  (In 40-2000 milliseconds range, default is 400)  
*Gain:* *TX*   *RX*    
*Disable Line Echo Canceller (LEC):* ☒ No ☐ Yes  
*Disable Network Echo Suppressor:* ☒ No ☐ Yes  
*Outgoing Call Duration Limit:*  (0-180 minutes, default is 0 (No Limit) )  
*Ring Frequency:*    
*Enable High Ring Power:* ☒ No ☐ Yes

**Ring Tones** (Syntax: c=on1/off1-on2/off2-on3/off3;)

*Ring Tone 1:*   
*Ring Tone 2:*   
*Ring Tone 3:*   
*Ring Tone 4:*   
*Ring Tone 5:*   
*Ring Tone 6:*   
*Ring Tone 7:*   
*Ring Tone 8:*   
*Ring Tone 9:*   
*Ring Tone 10:*

   

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