

## Grandstream Device Configuration

**STATUS****BASIC SETTINGS****ADVANCED SETTINGS****FXS PORT1****FXS PORT2****Account Active:** ☐ No ☒ Yes**Primary 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)**Allow DHCP Option 120( override SIP server ):** ☒ No ☐ Yes**SIP Transport:** ☒ UDP ☐ TCP ☐ TLS (default is UDP)**NAT Traversal:** ☐ No ☒ Keep-Alive ☐ STUN ☐ UPnP**SIP User ID:**  (the user part of an SIP address)**Authenticate ID:**  (can be identical to or different from **SIP User ID**)**Authenticate Password:**  (purposely not displayed for security protection)**Name:**  (optional, e.g., John Doe)**DNS Mode:** ☒ A Record ☐ SRV ☐ NAPTR/SRV**Tel URI:** **SIP Registration:** ☐ No ☒ Yes**Unregister On Reboot:** ☒ No ☐ Yes**Outgoing Call without Registration:** ☒ No ☐ Yes**Register Expiration:**  (in minutes. default 1 hour, max 45 days)**Reregister before Expiration:**  (in seconds. 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 Keep Alive:** ☒ No ☐ Yes**SIP OPTIONS Keep Alive Interval:**  (in seconds. Between 1-64800, default is 30)**SIP OPTIONS Keep Alive Max Lost:**  (Number of max lost packets for SIP OPTIONS Keep Alive before re-registration. Between 3-10, default is 3)**SIP OPTIONS Keep Alive Max Lost:**  (Number of max lost packets for SIP OPTIONS Keep Alive before re-registration. Between 3-10, default is 3)**Layer 3 QoS:**  SIP DSCP (Diff-Serv value in decimal, default 24) RTP DSCP (Diff-Serv value in decimal, 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 ☒ Yes**Use Random RTP Port:** ☐ No ☒ Yes**Hold Target Before Refer:** ☐ No ☒ Yes**Refer-To Use Target Contact:** ☒ No ☐ Yes**Transfer 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

SIP REGISTER Contact Header Uses: ☒ LAN Address ☐ WAN Address

SIP T1 Timeout:

SIP T2 Interval:

SIP Timer D:  (0 - 64 seconds. Default 0)

DTMF Payload Type:

Preferred DTMF method: Priority 1:   
(in listed order) Priority 2:   
Priority 3:

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:  (User ID/extension to dial automatically when offhook)

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:  used if incoming caller ID is   
 used if incoming caller ID is   
 used if incoming caller ID is

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

*Do Not Escape '#' as %23 in SIP URI:* ☒ No ☐ Yes

*Disable Multiple m line in SDP:* ☒ No ☐ Yes

*Ring Timeout:*  (10-300, default is 60 seconds)

*Delayed Call Forward Wait Time:*  (Allowed range 1-120, in seconds.)

*No Key Entry Timeout:*  (in seconds, 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)

*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:*

*Session Expiration:*  (in seconds. default 180 seconds)

*Min-SE:*  (in seconds. default and minimum 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:* choice 1:

(in listed order) choice 2:

choice 3:

choice 4:

choice 5:

choice 6:

*Voice Frames per TX:*

*G723 Rate:* ☒ 6.3kbps encoding rate ☐ 5.3kbps encoding rate

*iLBC Frame Size:* ☒ 20ms ☐ 30ms

*iLBC Payload Type:*  (between 96 and 127, default is 97)

*VAD:* ☒ No ☐ Yes

*Symmetric RTP:* ☒ No ☐ Yes

*Fax Mode:* ☒ T.38 ☐ Pass-Through

*Fax Tone Detection Mode:* ☒ Caller ☐ Callee ☐ Caller or Callee

*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

Polarity Reversal: ☒ No ☐ Yes (reverse polarity upon call establishment and termination)

Loop Current Disconnect: ☒ No ☐ Yes (loop current disconnect upon call termination)

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:  (15-60 Hz, default is 20 Hz )

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: