

GAC2500 Firmware Release Notes

IMPORTANT UPGRADE NOTES

- To support new hardware, once upgraded to firmware 1.0.3.47, the device cannot be downgraded to 1.0.3.45 or lower.
- To support new hardware, once upgraded to firmware 1.0.3.45, the device cannot be downgraded to 1.0.3.42 or lower.
- To support new hardware, once upgraded to firmware 1.0.3.42 or later, the device cannot be downgraded to 1.0.3.38 or lower.
- To support new hardware, once upgraded to firmware 1.0.3.35 or later, the device cannot be downgraded to 1.0.3.30 or lower.
- To support new hardware, once upgraded to firmware 1.0.3.27 or later, the device cannot be downgraded to 1.0.3.20 or lower.
- To support new hardware, once upgraded to firmware 1.0.3.19 or later, the device cannot be downgraded to 1.0.3.17 or lower.



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PRODUCT NAME

GAC2500

DATE

08/24/2023

FIRMWARE FILE INFORMATION

• Firmware file name: gac2500fw.bin

MD5: 54229a5262cc70134c79ca22d26ea05e

CHANGES SINCE FIRMWARE VERSION 1.0.3.47

ENHANCEMENT

• (None)

BUG FIX

• Fixed some LCD flickering issue.



PRODUCT NAME

GAC2500

DATE

07/05/2023

FIRMWARE FILE INFORMATION

• Firmware file name: gac2500fw.bin

MD5: 823241094e038c62928fd4c695cf23cc

CHANGES SINCE FIRMWARE VERSION 1.0.3.45

ENHANCEMENT

Supported new LCD hardware.

BUG FIX

• (None)



PRODUCT NAME

GAC2500

DATE

09/01/2022

FIRMWARE FILE INFORMATION

• Firmware file name: gac2500fw.bin

MD5: 925314dfd6d893bcb9cc78979d04d037

CHANGES SINCE FIRMWARE VERSION 1.0.3.42

ENHANCEMENT

• Supported TLS version 1.2 when downloading contacts.

BUG FIX

Fixed GAC2500 doesn't send 2000K when answering the call.



PRODUCT NAME

GAC2500

DATE

03/03/2022

FIRMWARE FILE INFORMATION

Firmware file name: gac2500fw.bin

MD5: 2c097b16f9278b23825d0590538caa43

CHANGES SINCE FIRMWARE VERSION 1.0.3.38

ENHANCEMENT

- Supported provision fails over to config server path when the device fails to provision from DHCP Option.
- Supported P22421 to control reboot on provision. When set to 1 in the config file, the device will always reboot on provision.

- Fixed device fails to display the IPv6 address when Internet protocol is IPv6 only.
- Fixed device fails to download the contacts from Metaswitch server.
- Fixed device fails to start Google Play downloaded from GS Market.
- Fixed device fails to download config file from the new server after provision.
- Fixed device fails to connect ESSID with 802.1x authentication from WiFi settings.



PRODUCT NAME

GAC2500

DATE

07/05/2019

FIRMWARE FILE INFORMATION

• Firmware file name: gac2500fw.bin

MD5: dddb8493ecce9c02d90a5807c0b8d01a

CHANGES SINCE FIRMWARE VERSION 1.0.3.37

ENHANCEMENT

(None)

- Fixed 802.1X authentication is not working with EAP-TLS mode.
- Fixed some security issues by disabling weak SSL cipher encryption.
- Fixed device fails to disable Bluetooth after reboot and pairing with GVC32xx.
- Fixed device fails to automatically input the contact number to dialing interface when transferring a call.



PRODUCT NAME

GAC2500

DATE

03/20/2019

FIRMWARE FILE INFORMATION

• Firmware file name: gac2500fw.bin

MD5: f6e70b8613c3e831ae4c41c7d274b132

CHANGES SINCE FIRMWARE VERSION 1.0.3.35

ENHANCEMENT

Improved weather API by appending user-agent and supporting TLS two-way authentication.

- Fixed device does not display lock icon during an SRTP call using TLS SIP protocol.
- Fixed default CA path which will cause invalid parameter issue.
- Fixed security issue that obtaining root access using unauthenticated remote code.



PRODUCT NAME

GAC2500

DATE

12/17/2018

FIRMWARE FILE INFORMATION

• Firmware file name: gac2500fw.bin

MD5: 68fc2123a1f405370897a4f42962312d

CHANGES SINCE FIRMWARE VERSION 1.0.3.30

ENHANCEMENT

- Supported the BroadWorks Xtended Services Interfaces (Xsi) Directories and Call Log features in web
 UI -> Contacts -> Broadsoft. [BROADSOFT XSI]
- Updated web UI login error prompt.
- Updated the error prompt display in setting static IP.
- Supported one-click debug function to capture Wireshark trace, Syslog, and logcat from web UI.
 [ONE-CLICK DEBUG]

BUG FIX

- Fixed LCD display oscillation issue with new hardware.
- Fixed Weather app failed to update issue.
- Fixed call drops during ringing when rel100 is enabled.

NEW FEATURES OVERVIEW

This section lists major new features and describes how to use it from the user's point of view.

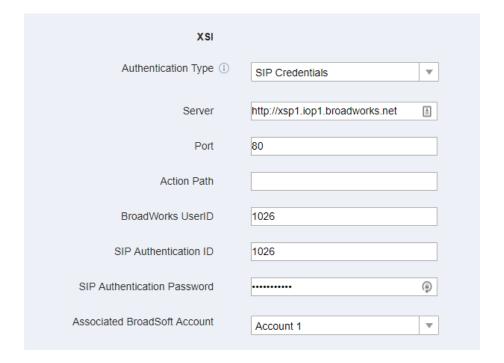
BROADSOFT XSI

The BroadWorks Xsi Directories and Call Logs configuration is completed by the BroadWorks server administrator or service provider. End users should be given Xsp server URI and user credentials to access the service.

- 1. Log in Web GUI and register the BroadWorks account on the phone.
- 2. Browse to Contacts -> Broadsoft.

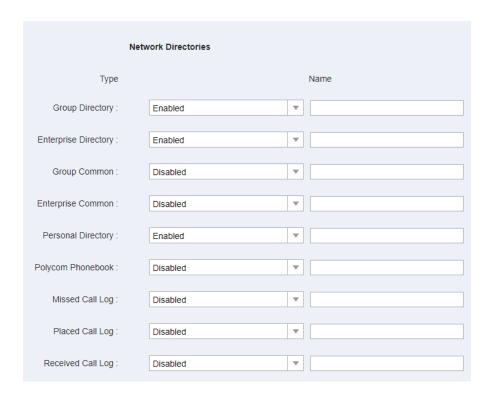


- Fill the BroadWorks XSP server address in the Server blank. If the BroadWorks Xsp server requires to use the HTTPS, please add the header "https://" ahead of BroadWorks Xsp server URI. For example, "https://xsp1.iop1.broadworks.net".
- Fill the XMPP port number in the Port blank. The default port number is 80. If the BroadWorks Xsp server requires to use the HTTPS, please fill the HTTPS port number "443" in the blank.
- Based on Authentication Type, fill in different authentication information.
 LogIN Credentials: Fill the BroadWorks Xsi credentials in BroadWorks UserID and Password blanks.
 SIP Credentials: Fill the SIP Authentication ID in SIP Authentication ID, and fill the SIP User ID in BroadWorks UserID. Users also need to fill the SIP Authentication Password in Password.
- Fill in the action path in Action Path blank.

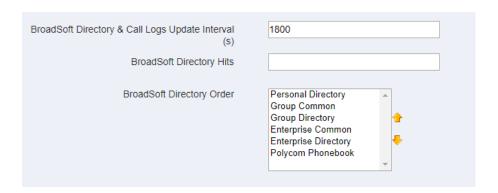


• If users need to use the selected Directory or Call Log categories, please set the categories as "Enabled", for example, "Group", "Enterprise", and "Personal" are checked as below.



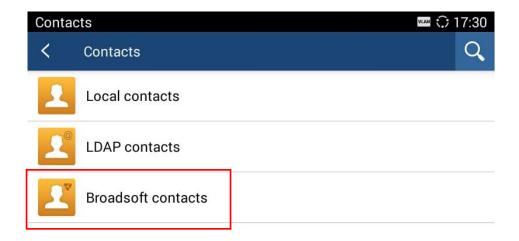


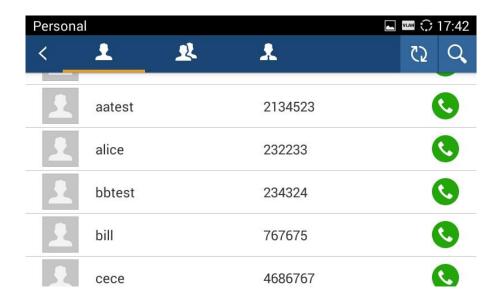
• End user is able to rename each directory or call log category. If user types a string into the blank, it will override the default name. For example, the Group Directory's default name is "Group" if it keeps blank. If the user fills "Grandstream" into the blank, the phone will display "Grandstream" for the Group Directory.



3. After filling the information, open Contact app and click Broadsoft contacts, the correct login information would display the list of contacts, under different groups selected before.



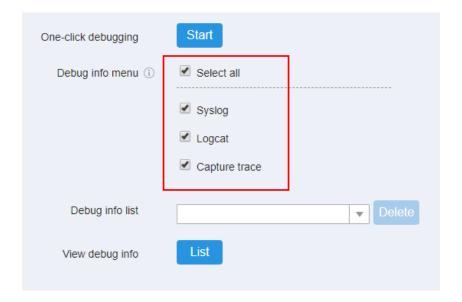




ONE-CLICK DEBUG

This feature allows user to get all checked information for debugging. Go to web UI -> Troubleshooting -> Debug to check the debug information, shown as below.







PRODUCT NAME

GAC2500

DATE

06/27/2018

FIRMWARE FILE INFORMATION

Firmware file name: gac2500fw.bin

MD5: 68113d890bfe267d2d38655844b18b07

CHANGES SINCE FIRMWARE VERSION 1.0.3.27

ENHANCEMENT

Supported Ignore early media in conference in web UI -> Advanced Settings -> Call features. Once
enabled, the device would not play early media in an outgoing call in conference. P-value is 22222.
Default is No - 0.

- Fixed some LCD compatibility issue.
- Fixed device P-value of custom certificate does not work.
- Fixed auto answer does not work when device is on cascade mode with another device.



PRODUCT NAME

GAC2500

DATE

04/27/2018

FIRMWARE FILE INFORMATION

• Firmware file name: gac2500fw.bin

MD5: 68113d890bfe267d2d38655844b18b07

CHANGES SINCE FIRMWARE VERSION 1.0.3.20

ENHANCEMENT

- Replaced expired pem certificate for security improvement.
- Set the default value of Cust file download mode to HTTP.
- Added a prompt for RTCP destination address if port number is not offered.
- Supported adding custom CA certificate to device under web UI -> Maintenance -> Security Settings.[CUSTOM CERTIFICATE]

BUG FIX

- Fixed device web UI -> Debug -> View trace does not work after web UI -> Security settings -> HTTP port is changed.
- Fixed web UI Recording page rename issue.
- Fixed an issue on web UI -> Account -> SIP settings -> "Use Actual Ephemeral Port in Contact with TCP/TLS".
- Fixed device cannot download phonebook.xml file via TFTP.
- Fixed device uses random port rather than 5060 for sending SIP message.
- Fixed some issue on LLDP.
- Fixed device fails on TLS calls due to incorrect format of SIP messages.
- Fixed device cannot retrieve a parked call on Ganband.

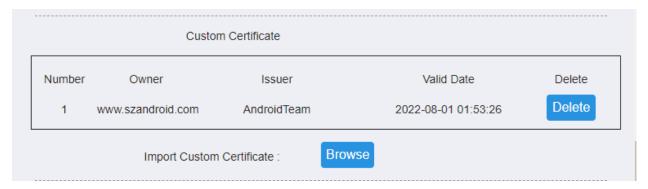
NEW FEATURES OVERVIEW

This section lists major new features and describes how to use it from the user's point of view.



CUSTOM CERTIFICATE

This feature allows user to upload custom certificate. P-value is 8472. The priority of certificate is SIP TLS Certificate/Private Key (Only SIP TLS used) > Custom Certificate > Individual Certificate > Generic Certificate.





PRODUCT NAME

GAC2500

DATE

11/20/2017

CHANGES SINCE FIRMWARE VERSION 1.0.3.17

ENHANCEMENT

- Updated the random automatic upgrade configuration so it can take effect without reboot.
- Optimize Bluetooth performance.
- Added support for TLSv1.1 and TLSv1.2.
- Updated web UI -> Network settings -> Layer 3 QoS for SIP default value to 26, Layer 3 QoS for Audio to 46
- Added option to block image gallery options via GUI Config Tool 3.9.0. [BLOCK IMAGE GALLERY]
- Added support for auto download firmware/configuration files randomly in time window. [RANDOM UPGRADE IN A TIME WINDOW]
- Removed icon for reboot from web UI -> Advanced Settings -> General Settings -> "STUN Server",
 "Use NAT IP" and "SIP TLS Private Key" settings.
- Added admin password authentication for factory reset if the "Configuration via Keypad Menu" is set to
 Constraint mode or Basic settings only. Press the same number key multiple times to generate letters.
 And press "#" to confirm the password.

BUG FIX

- Fixed voicemail update issue after reboot.
- Fixed critical Wi-Fi security issue that Wi-Fi Protected Access (WPA) handshake traffic can be manipulated to induce nonce and session key reuse.
- Fixed device displays wrong update button after installing Google Play from GS Market and restart.

NEW FEATURES OVERVIEW

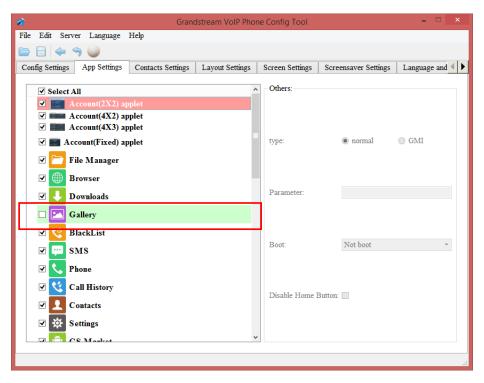
This section lists major new features and describes how to use it from the user's point of view.

BLOCK IMAGE GALLERY

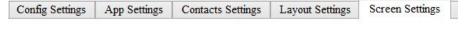
This feature allows admin to prevent user from changing the background image on the device.

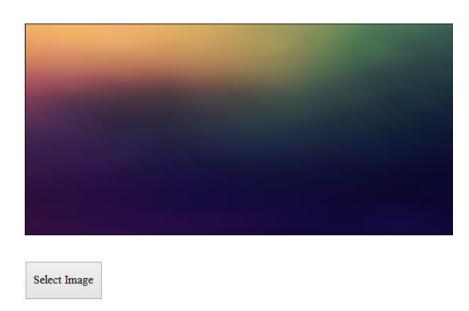
1. Open GUIConfigTool -> App Settings: uncheck Gallery app.





2. Go to GUIConfigTool -> Screen Settings: Check "Not allow changing wallpaper again".





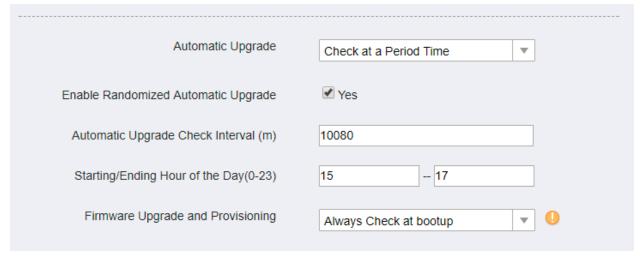
Not allow changing wallpaper again: ✓ yes



RANDOM UPGRADE IN A TIME WINDOW

Allows device auto download the firmware/config without manually trigger it in a period of time. P-values are: Enable Random Automatic Upgrade: 8458, 0 is No by default, 1 is Yes. Start Hour of the Day: 285. End Hour of the Day: 8459.

- 1. Go to web UI -> Maintenance -> Upgrade -> Auto Upgrade: Check at a Period Time.
- 2. Set Enable Randomized Automatic Upgrade to "Yes";
- 3. Set Starting/Ending Hour of the Day(0-23).





PRODUCT NAME

GAC2500

DATE

08/28/2017

CHANGES SINCE FIRMWARE VERSION 1.0.3.13

ENHANCEMENT

- Added DNS SRV Fail-over Mode under web UI -> Account -> Network Settings -> DNS SRV Fail-over Mode. [DNS SRV FAILOVER MODE]
- Supported 4 types of Internet Protocol: IPv4 only, IPv6 only, Both but prefer IPv4, Both but prefer IPv6.
 [INTERNET PROTOCOL]
- Added Syslog protocol and Syslog keyword filter for Syslog. [SYSLOG PROTOCOL AND KEYWORD FILTER]
- Added string validation for web UI -> Advanced settings -> General settings -> Guest Login PIN Code.
- Added default value "**" for web UI -> Advanced Settings -> MPK General Settings -> BLF Call-pickup Prefix.
- Updated feature code to access factory diagnosis app. The feature code is "***3424".
- Updated some Chinese translation in web UI and LCD.
- Updated tooltips in web UI.
- Increased the length of configuration "Syslog server address" on web UI from 32 characters to 128 characters.
- Supported contact download server using IPv6 address with subdirectory.
- Supported IPv6 address for Syslog server.
- Supported IP call via TCP transport.
- Supported new config file format: cfggac2500.xml for GAC2500.
- Removed SIP server field validation in web UI.

- Fixed device does not sync Google account groups on LCD, but only on web UI.
- Fixed device does not display contact name in web UI call page.
- Fixed device cannot download firmware or config file from valid address when the network protocol is only IPv6.
- Fixed Web UI displays "Hold" button in web UI is still blue even one conference member has unhold.
- Fixed device cannot make conference IP call if there is activated but not registered account.
- Fixed Accounts in the same virtual group would not take effect when making a call via MPK.



- Fixed When a call is attended transferred to device, device displays "CallHistory has stopped running".
- Fixed device call transfer MPK ignores the account.
- Fixed When device is in a call and screen-off is enabled from dropped down status bar, another
 incoming call would not bring the screen on.
- Fixed After setting up the virtual group, the first account of the dial-up interface is not selected by default.
- Fixed When there are multiple incoming calls to device but device is in a conference call, there is no prompt asking for call selection.
- Fixed device displays incorrectly after creating a speed dial MPK during a conference call.
- Fixed device CPE process issue.
- Fixed device web UI call display does not match the account from Contact.
- Fixed device adding schedule member from History does not use Contact name.
- Fixed WiFi is enabled when unplugging and replugging Ethernet cable via PPPoE.
- Fixed device importing a former exported CSV file would use active account for a contact.
- Fixed device does not sync the group ringtone between web UI and LCD.
- Fixed device display issue when SRTP is enabled and forced, and auto answer is enabled.
- Fixed CallHistory does not match the name from Contacts when the contact is using active account.
- Fixed device repeats REGISTER and unREGISTER under some IPv6 network settings.
- Fixed A call would drop after 45 seconds after attended transfer.
- Fixed device can use SMS to reject an anonymous call.
- Fixed When device is recording, incoming calls will make device prompt "the recording has been saved" twice.
- Fixed device still keeps the duplicate name after prompt after updating MPK group call name to an existing one.
- Fixed After GVC (connected to GAC2500 via Bluetooth) reboots, device turns off the Bluetooth but cannot record.
- Fixed some TR069 response error will trigger reboot.

NEW FEATURES OVERVIEW

This section lists major new features and describes how to use it from the user's point of view.

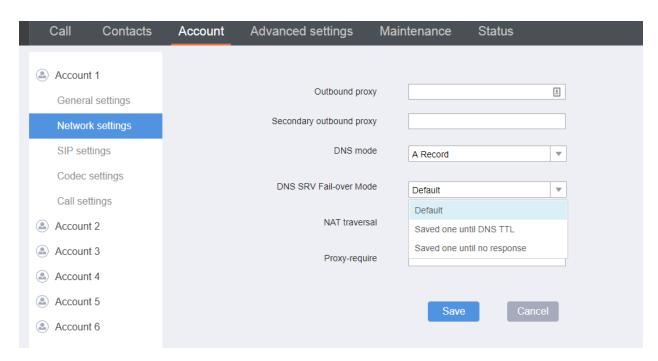
DNS SRV FAILOVER MODE

Configure the preferred IP mode for DNS SRV.

- If "default" is selected, first IP from query result will be applied.
- If "Saved one until DNS TTL" is selected, first IP will be applied before reaches DNS timeout.
- If "Saved one until no response" is selected, first IP will be applied even after DNS times out until it cannot response.

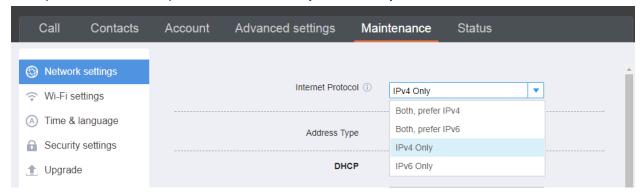
P-value is 26040, 26140, 26240, 26340, 26440 and 26540 for account 1/2/3/4/5/6. 0 - Default, 1 - Saved one until DNS TTL, 2 - Saved one until no response.





INTERNET PROTOCOL

This option is under web UI -> Maintenance -> Network Settings -> Internet Protocol. P-value is 1415. 0 - Both, prefer IPv4, 1 - Both prefer IPv6, 2 - IPv4 only, 3 - IPv6 only.

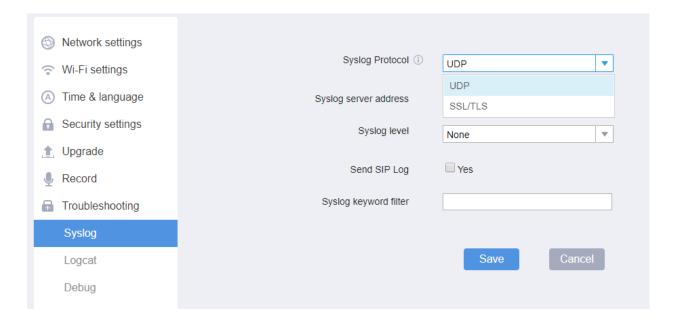


SYSLOG PROTOCOL AND KEYWORD FILTER

This option is under web UI -> Maintenance -> Troubleshooting -> Syslog.

- Syslog Protocol allows users to use SSL/TLS to send Syslog. P-value is 8402. 0 UDP, 1- SSL/TLS.
- Key word filter allows users to filter the Syslog including the keywords separated by comma. P-value is 22129.







PRODUCT NAME

GAC2500

DATE

04/19/2017

CHANGES SINCE FIRMWARE VERSION 1.0.3.11

ENHANCEMENT

- Updated more tool tips on web UI.
- Added new voice modes "Small room & Denoise" and "Small room & Enhance denoise" in web UI -> Advanced settings -> Call features -> Voice Mode.
- Updated default NTP server address to "pool.ntp.org".
- Updated tool tip for web UI -> Maintenance -> Network settings -> Bypass Proxy For, Multiple IP addresses can be separated by ",".
- Updated device displays caller information based on "Referred-By" header in incoming call page on LCD.
- device displays third party on LCD after device is transferred to third party.
- Updated that device does not support multicast paging using port 0.
- Abandoned the animation of "Click to return call" on status bar.

- Fixed incoming number without "+country code" does not match the number with "+country code" in Contacts.
- Fixed device loses schedule records after upgrading from fw1.0.1.44.
- Fixed device still plays system ringtone when other ringtones are selected for account 2 6.
- Fixed a Bluetooth-shared account stops app from running after the conference members are deleted one by one on GVC.
- Fixed device plays music on the Kugou music app and "contact has stopped running" appears.
- Fixed device does not delete a circle conference in Google calendar after it is expired.
- Fixed device does not jump back to conference interface from speed dial MPK when there is a line call in the conference.
- Fixed device conference control apk crashes when USB connected to a GVC and GVC turns off then on the video in a call.
- Fixed device pops up "Account is not available" when using active account 2 6 to MPK dial DTMF.
- Fixed that the recording rename text label is not centered in the prompt.
- Fixed device cannot hold all in conference when there is outgoing call.



- Fixed device does not prompt "404" on web UI when adding an unregistered number into current conference.
- Fixed device Bluetooth has only one way audio with PC installed Windows 10.



PRODUCT NAME

GAC2500

DATE

01/24/2017

CHANGES SINCE FIRMWARE VERSION 1.0.3.5

ENHANCEMENT

- Made members label visible when adding new members in Schedule.
- Added a prompt to recover intercepted calls from blacklist.
- Hide "Associated account" in Schedule if there is no active account.
- Added support to change background color when clicking a file in File Manager List view.
- Updated prompt of exporting record file on LCD.
- Added Nonce header in SIP REGISTER method.
- Added placeholder for VPN settings.
- Updated prompt of video call request on LCD.
- Added support for RED with FEC. This option is under GAC2500 web UI->Account x->Code Settings:
 "Enable Audio RED with FEC".
- Added support for concurrent G.729 calls
- Updated default NTP server address
- Upgraded Google Service version to 10.0.84 (030-137749526) to fix crash issue

- Fixed device can schedule multiple meeting start at the same time.
- Fixed some error in Schedule when using PPPoE.
- Fixed device crashes on switching PPPoE to DHCP and selecting "No selected" in Google account Schedule syncing.
- Fixed device has no tooltip under Account -> Call settings -> Call forwarding mode: Others.
- Fixed device does not display conference history after it is rescheduled.
- Fixed device does not save records sequence after sorting.
- Fixed device layout issue after canceling and enabling recurring conference.
- Fixed device has error in displaying associated account after switching the name.
- Fixed device has no prompt when fails to save Google conference information.
- Fixed device Schedule would stop if device removes a Google account from Settings -> Accounts.
- Fixed device does not sync update via Bluetooth when GVC32xx deletes a member.
- Fixed coredump file generation issue.



- Fixed web UI does not show Dial and Delete icon under Contact -> Call History item when the mouse hovers over the time.
- Fixed device stays on ending interface for more than 3s when ends the Bluetooth line.
- Fixed device shows abnormal strings when editing Owner info in Security settings on LCD.
- Fixed device dialplan issue.
- Fixed device download contact interface on LCD display issue on Time interval settings.
- Fixed device edit icon is off place when using OTC cable to connect to USB flash drive.
- Fixed CPE will report "9007 illegal value" error when ACS sends some configuration.
- Fixed device adjusting call volume also affect the ringtone volume.
- Fixed some settings cursor are not at the end in the label.
- Fixed the selected language on the GAC2500 should be displayed under the "Language" option in TTS
- Fixed WiFi should be disabled when WiFi is selected twice in the setup wizard
- Fixed The soft key will pop up after selecting ringtone for a contact without number during re-editing
- Fixed The buttons below the expression box in the onscreen keyboard has no logo
- Fixed When "Use # as Dial Key" is disabled, pressing # will not redial the last outgoing call
- Fixed Conference control has stopped running after Bluetooth connection with GVC320x
- Fixed Conference password is displayed as plain text in schedule
- Fixed web UI should prompt message when starting or stopping recording
- Fixed crash issue when dial plan pattern has more than 20 characters
- Fixed Bluetooth is not disabled in phone's calling state



PRODUCT NAME

GAC2500

DATE

11/16/2016

CHANGES SINCE FIRMWARE VERSION 1.0.1.44

ENHANCEMENT

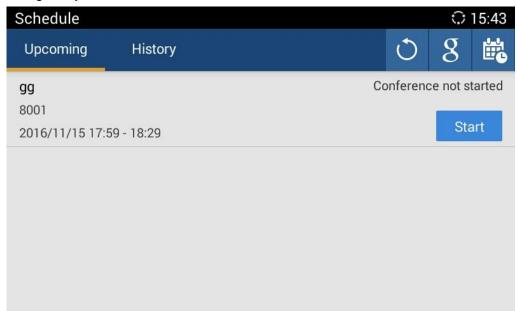
- Prompt tips when GAC2500 is connected to wrong GVC USB port.
- Supported IPv6.
- Supported setting Wi-Fi from web UI -> Maintenance.
- Added support for DHCP Option 132 & 133 tunneled through DHCP Option 43.
- Added voice mode setting in Settings -> Sound -> Call settings. Users can set 6 different voice mode.
- Added "Medium room & Rich voice" and "Medium Room & Clear Voice" option in web UI -> Advanced
 -> Call Features -> Voice Mode.
- Supports using dial pad to dial out call in Skype for business app.
- Improved audio process performance.
- When removing app from GUI Config tool, the GAC2500 will delete it including background service rather than hiding the app in background only.
- Added call detail in calling interface. When in a call, simply choose "More" and "Call Details".
- Added support to disable SSH without reboot.
- · Added some missing tooltips.
- On web UI MPK settings, Multicast Paging does not need to set the account.
- Improved the web UI design on IE browser.
- Added input inspection of multicast paging on web UI.
- Removed "Hide Local Call History" under web UI -> Advanced -> General Settings.
- Added contact categories when creating a new conference in web UI -> Contacts -> Schedule -> Add member icon.
- Changed web UI -> Contacts -> LDAP -> Max Hits valid range to 0 4000.
- Changed LDAP search timeout unit to second.
- device in a conference with an outgoing call will add all incoming call to conference.
- Changed internal storage icon.
- Added Virtual Group feature.

In web UI, go to different Account -> Call Settings: set the account to the same group. The phone can answer any incoming calls to each account in groups. If user makes an outbound call, the phone system will use the lowest ID account by default.



- Added more voice mode in web UI -> Advanced -> Call Features -> Voice Mode: "Medium room & Rich voice", "Medium Room & Clear Voice", "Small room & Denoise", and "Small & Enhanced denoise".
- Modify phone type and Email type to English only while importing/exporting Contacts xml file on Universal Phone Editor.
- Added "Hide Vocoder" in web UI -> Account -> Codec Settings. When set to "Yes", the codec information in an active call will be hidden.
- Added more operation on LCD for GVC320x when GAC2500 is connected to GVC320x via USB.
- Added count of calls for call history on LCD.
- Improved device's behavior when using option "Use # as Dial Key" to dial out:
 - 1. If input area has a number, device will check the account call settings to see if "Use # as Dial Key" is enabled or not:
 - 2. If input area has no number, device will use '#' as redial directly.
- Changed the layout of creating new group on web UI -> Contacts page.
- Synchronized the mute icon of minimized call interface on web UI.
- Improved Broadcast contact search works like local contacts to auto display.
- Trimmed the multicast name displaying on web talking interface.
- Allowed device to display a widget shape even there is no account registered.
- Added support for Google Calendar conference schedule features.

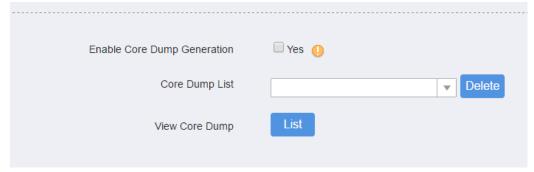
Open "Schedule" app, the users will see the "refresh" icon which is used for synchronizing the Google calendar event. The "g" icon indicates Google account settings and instruction about Google Calendar settings to sync the info to GAC2500.



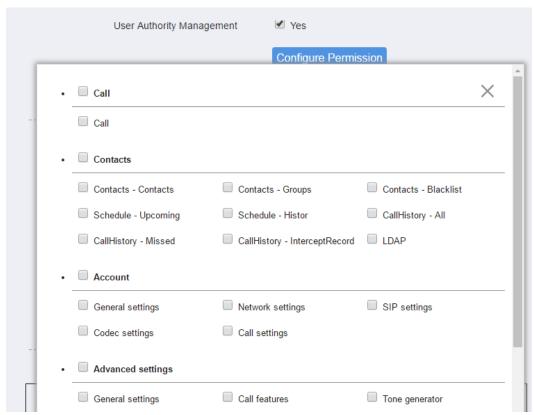
- Updated tooltip for "Complete upgrade" and "Unregister before new registration".
- Shortened reminding tone for incoming intercom call.
- Updated description under Contacts -> LDAP page.



Added Core dump feature under web UI -> Maintenance -> Troubleshooting -> Debug page.

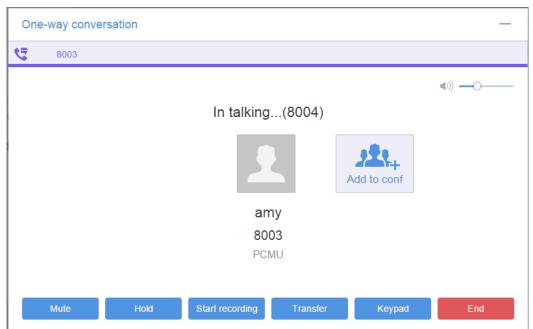


- Enable Core Dump Generation:
 Enable device to store core dump file when error occurs. Default is no. P-value is 29611.
- Core Dump List:
 Choose an existing core dump file to delete.
- View Core Dump:
 To view all the core dump files. User can download them for troubleshooting.
- Added "Disable web GUI" in web UI -> Maintenance -> Security settings. P-value is 29605. Default value is 0.
- Added P-value 29606 for fixed slave mode in web UI -> Advanced settings -> General settings -> Fixed Slave Mode. 0 No, 1 Yes.
- Added "User Authority Management" for admin under Web UI ->Maintenance->Security Settings. If checked, admin can choose accessible app via "Configure Permission".



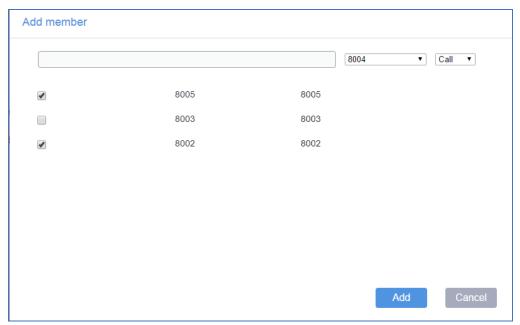


- Added support for Bluetooth A2DP sink role, which means GAC2500 can connect to GVC320x and mobile devices via Bluetooth to play music files.
- Added support for special control character 'T' in dialplan. "T" means dial delay. This is used with "No key entry timeout (s)".
 - For example, if the dialplan is set to {8001T}, when the user opens Phone app and dials 8001, the phone would not call out immediately, but will wait for the No key entry timeout to dial out.
- Added "Intercome barging" in Web UI -> Account -> Call settings.
 When "Intercom Barging" is enabled, if the current active call is an intercom call, the incoming intercom call will be automatically rejected; if the current active call is not an intercom call, the current active call will be put on hold and the incoming intercom call will be automatically answered. When "Intercom Barging" is disabled, a prompt will show to indicate the incoming intercom call without interrupting the current active call. The default setting is disabled.
- Added support for dialing multiple members in conf room during a call on web UI.
 - 1. device is in a call. Go to web UI -> Call. Click "Add to conf" to start a conference, shown as below.



 Click "+" to add members. For each member to add, input the number, and check the checkbox in the front of the number to add a member. In below example, the conference will add 8005 and 8002.





- 3. The "Add" button at bottom right is to call these members.
- Packed new CFG file for new hardware production.

- Fixed weather app does not work issue.
- Fixed lock screen pattern error notice position on LCD.
- Fixed Contacts app sort result by first name and last name are inverted.
- Fixed device displays a number on CallHistory and web UI Call History after the number is added to Blacklist.
- Fixed device does not have voicemail ringtone when switch to an account with unread voicemail.
- Fixed the incoming call notice covers the attended transfer option popup.
- Fixed device does not show call detail when there are call failed or calling lines in conference.
- Fixed device gives wrong notice "transfer failed" when press Call Transfer MPK key in idle state.
- Fixed device cancels speed dial via active account and gives wrong notice "Account is not available" while there is active accounts.
- Fixed slave GAC does not quit cascade interface after unplugging the RJ48 cable when device connects GVC with USB cable.
- Fixed slave GAC remains USB connection interface after disconnects PC and master GAC.
- Fixed device Click2Dial does not work from web page on LCD.
- Fixed device LCD shows multiple incoming calls when connecting GVC that has an incoming call.
- Fixed device web UI can run JavaScript code.
- Fixed device Upload Device Configuration from web UI does not take effect on some account parameters.
- Fixed device LCD displays pattern screen lock after device upgrades via USB.
- Fixed device LCD may remain cascade interface after disconnected PC via USB cable.



- Fixed device does not display name and number of a contact on web UI when the contact calls anonymously.
- Fixed device does not lock call mode after entering the number.
- Fixed device displays a non-contact number twice in calling interface on web UI.
- Fixed device creates a new contact from Callhistory puts the number in name area by default.
- Fixed device automatically add the incoming call into conference and answers it when device is trying to call 2 numbers from web UI.
- Fixed device is having an SRTP call, but no lock icon is displayed on web.
- Fixed device search icon disappears after select all and unselect all in File Manager.
- Fixed device tooltip display issue of "Voice Frames Per TX" on web UI.
- Fixed device "RTCP Destination" allows address without port number.
- Fixed device speed dial via active account under MPK does not work.
- Fixed device does not show no schedule reminder after press "Screen off" from status bar
- Fixed device schedules a conference from web UI but it would not sync to LCD dialpad.
- Fixed device adding an MPK Multicast Paging to conference does not display "multicast" in member's name.
- Fixed device uploading config file would not take effect on some of settings.
- Fixed device minimizes a conference on web UI would overlap the last record of call history.
- Fixed device cannot display existing line in web UI transfer interface.
- Fixed some LLDP issue.
- Fixed device web UI -> Account -> SIP Settings -> OPTIONS Keep Alive Interval (s) has no prompt when input number is invalid.
- Fixed when device adds a multicast paging to a conference, there is no "multicast" after the name on web UI display like that on LCD.
- Fixed device does not display conference history in auto match when dialing a number.
- Fixed device can input duplicate number on LCD and dial out.
- Fixed device incoming call tab on LCD is not in order.
- Fixed device can create more than one group calls with the same name. Different names are required.
- Fixed device asks for password after selecting an export directory for a recording in Recorder app.
- Fixed device prompts "Launcher3 has stopped" after delete the wallpaper which is being used.
- Fixed device Phone app cannot hold '0' key to dial '+'.
- Fixed device creating a new contact from call history does not put the name in name field.
- Fixed device only intercepts the first number of a contact if the contact has more than one number.
- Fixed device editing a contact on LCD prompts "Custom label name" after the contact is created on web UI with only email.
- Fixed device does not turn off callforward in some situation.
- Fixed device does not display full call history for Bluetooth account on LCD.
- Fixed device would ring account 2 when it initiates an intercom call which includes itself.
- Fixed device can't establish any call after it sends SUBSCRIBE REGISTER without response.



- Fixed device enables Conference server and set Auto Mute on Entry to "Auto mute on incoming call" from web UI -> Advanced Settings -> Call features. device answers multiple incoming calls would auto hold one line and cannot unhold. P-value is 29602.
- Fixed device sends register to secondary outbound proxy without authentication.
- Fixed Option 66 does not take effect when download via http/https.
- Fixed device removes CA certificate but the related account status is not updated.
- Fixed \$ symbol is not accepted in the SIP User ID Parameter.
- Fixed dialplan takes effect on emergency call when device has screen lock.
- Fixed device message reply cannot use '\n' on web UI.
- Fixed Missed call interface won't display name and display name of the searched form LDAP.
- Fixed some tooltips that do not match default settings.
- Fixed device gets silenced when connects and disconnects iPhone 6S.
- Fixed device shows its own DND icon after getting controlled by GVC.



PRODUCT NAME

GAC2500

DATE

07/12/2016

CHANGES SINCE FIRMWARE VERSION 1.0.1.40

ENHANCEMENT

(None)

- Fixed Weather app does not update issue.
- Fixed device still asks for username and password even the address does not need validation.
- Fixed device LCD displays pattern screen lock after device upgrades via USB.
- Fixed device LCD may remain cascade interface after disconnected PC via USB cable.
- Fixed some PMU issues.



PRODUCT NAME

GAC2500

DATE

05/18/2016

CHANGES SINCE FIRMWARE VERSION 1.0.1.34

ENHANCEMENT

Update rescue, speed up upgrade speed.

- Fixed device selects a custom ringtone which is stored in USB from LCD for a specific contact, does
 not change back to system ringtone when the USB is disconnected.
- Fixed device does not give prompt when dialing number does not match dial plan on web UI.
- Fixed device repeatedly plays notification tone after upgrading.
- Fixed device cannot end Skype call.
- Fixed device displays wrong information when using feature code *17.
- Fixed device displays mute/block for multicast lines on web UI which is different from LCD.
- Fixed device download status disappears when sliding right twice when downloading apps in GS Markets.
- Added Guest Login option under Advanced Settings -> General Settings must reboot to take effect.
- Fixed device holds a participant in a conference, then mutes itself but does not change mute status.
- Fixed device enters MPK and then cannot return to talking interface after locking screen.
- Fixed device cannot update immediately after contact number is changed.
- Fixed device dialplan does not work on matching specific numbers.
- Hided 'Virtual Account Group' setting since not fulfill at current time.
- Removed IPv6 setting since not fulfill at this version.
- Fixed device does not send request to FW server after receiving server address carried in option 66.
- Fixed sometimes audio echo issue.



PRODUCT NAME

GAC2500

DATE

03/28/2016

CHANGES SINCE FIRMWARE VERSION 1.0.1.31

ENHANCEMENT

- Updated tool tips style in web UI
- Updated layout of MPK app and MPK widget on LCD
- Added a quick access softkey to MPK (Hotkeys) app below the SIP accounts in dial pad
- Moved some apps into Tool Folder directory by default
- Added Contacts access softkey in MPK app
- Added Icon on notification bar when PNP is enabled
- Added Option to add a contact to MPK speed dial in Contacts app. Here is the step to use it:
 - 1. Open Contacts app, select a contact.
 - 2. Select a number in the contact.
 - 3. On the upper right, press "Send" icon and check "Send to Speed Dial (Hotkey)".
 - 4. In MPK app, there would be an icon created for the contact speed dial.
- Updated the videos in Tips app according to new firmware's UI and features
- Added Group Call feature in MPK. Here is the step to use it:
 - 1. On LCD, open MPK app and enter the adding MPK page by tapping the icon on the upper right.
 - 2. Select "Group Call" in the key mode.
 - 3. Fill in the Group name, and check "Mute all" if you want to have participants muted when entering the conference call.
 - 4. In the account list below, users can add up to 6 accounts by filling the numbers, names and selecting a registered account;
 - 5. Users can also edit this MPK in web UI->Advanced->MPK LCD Settings->Key Mode: Group Call.

- Fixed device does not override the ACS URL under TR-069 if there is one in DHCP Option 53
- Fixed device does not display transferee but transferer info after transferer performs attended transfer
- Fixed device set "Mute All" or "Block All" in a conference but does not take effect on newly added attendees
- Fixed device does not have prompt when attended transferring to a user while the user is calling device



- Fixed device can't be provisioned successfully for the first time after factory reset
- Fixed device cannot search Wi-Fi when set to some country code
- Fixed device web UI will display single call interface first when calling multiple numbers
- Fixed LCD lock icon would disappear after resuming a SRTP call on hold
- Fixed USB cascade mode would make device display Chinese incorrectly
- Fixed device fails to transfer a number with filtered characters from web UI
- Fixed device password input from locked screen overlaps notification bar
- Fixed The renamed paired Bluetooth device on device had the name changed back automatically after device searches for devices again
- Fixed device "Show account name only" does not apply on some accounts settings
- Fixed Mute All/Block All buttons do not work when some member is on hold in a conference
- Fixed device does not send LLDP package after power cycle
- Fixed device converts a folder into a file before deleting it
- Fixed Lync talking via BT headset does not take effect



PRODUCT NAME

GAC2500

DATE

03/04/2016

CHANGES SINCE FIRMWARE VERSION 1.0.1.26

ENHANCEMENT

- Added option to hold individual participant in conference call
 - 1. During a conference call, tap the participant icon to display 5 softkeys.
 - 2. Select the middle softkey to hold the participant.
 - 3. Tap on the participant icon and then select the left softkey to resume.
- Added ability to download audio recording from web UI
 - 1. During a call, tap on "Start recording" to start recording the call, then tap on "Stop recording" to stop recording. Or create a recording via Recorder app on GAC2500.
 - 2. Go to GAC2500 web UI->Maintenance->Recording page to download the file.
- Improved provisioning when GAC2500 is provisioned with Broadsoft server

- Fixed device should not be allowed to schedule a conference if no account is registered
- Fixed Firmware error message in notification bar is not fully displayed
- Fixed The number selected from call history cannot be added to blacklist
- Fixed Error pops up when quickly tapping on "Enable password" in Recorder app
- Fixed device fails in downloading recordings that was renamed from wen UI
- Fixed Synchronization issues on slave device with master device
- Fixed Slave device can input feature code bypassing master device
- Fixed Slave device displays white screen in calling when master device is connected to GVC via Bluetooth
- Fixed device calling interface does not display name on status bar if the number is from LDAP
- Fixed device does not display conference interface in multicast paging when Conference server is enabled
- Fixed device goes to different page after ending an incoming call during a conference
- Fixed device account registered on UCM has a wrong option under More in calling page when answering an incoming call during a conference
- Disabled mute icon when the conference is hold
- Fixed device displays wrong member info in conference after failure to transfer it to others



- Fixed device does not display "unhold" after pressing "hold" in a conference with unknown number
- Fixed Some cascade mode asynchrony issues
- Fixed device backup restore process freezes on LCD during a call
- Fixed device does not disable "More" option in calling page when receiving remote ringtone
- Fixed device calls crashes when pressing home key in an attended transfer call



PRODUCT NAME

GAC2500

DATE

01/15/2015

CHANGES SINCE FIRMWARE VERSION 1.0.1.18

ENHANCEMENT

- Added option "Show account name only" in SIP account settings
- Added option "Tel URI" in SIP account settings
- Improved LCD display when the user name is too long
- Improved web UI display for certain icons and options
- Added feature to not allow new call when the phone is transferring a call
- Added option to enable navigation bar arrow under LCD menu->Settings ->Display
- Added option to select large room or small room under web UI->Advanced->Call features for the user to achieve better audio effect in different room sizes
- Added recording management page in web UI
- Added progress dialog display on LCD when switching to Bluetooth mode
- Added ability to add caller to conference when the phone is ringing
- Cleared missed call notification in idle screen after user enters the Call History
- Moved "Wireless & Network settings" under "Advanced settings" in LCD menu->Settings
- Moved Bluetooth settings from "Wireless & networks settings" to "Settings" in LCD menu->Settings

- Fixed Music will be paused if connecting BT headset when playing music
- Fixed device should not allow deleting soft key when AUX3.5mm is used
- Fixed Registered account disappears on the widget after cancelling reboot on LCD
- Fixed Hands-free dialing delay for Bluetooth account
- Fixed Abnormal LCD display after ending the call
- Fixed device does not display contact name after call transfer is rejected
- Fixed Error is prompted in MPK call transfer process
- Fixed device display is incorrect after using MPK multicasting in a call and then ending it
- Fixed device can manually start the scheduled conference when there is already a conference in progress
- Fixed device cannot obtain customized file
- Fixed The conference reminder shows up after the conference begins



- Fixed Audio from device has delay after resuming the call on hold
- Fixed device needs re-enter the menu to see text to speech example change
- Fixed Web UI option "Replace by Name" doesn't take effect when downloading contacts
- Fixed device will automatically change language after connecting to Wi-Fi by manually entering SSID and password
- Fixed device does not have ringback tone after transferring the call using attended transferred and the remote 3rd party is ringing
- Fixed some LDAP configuration issues
- Fixed some LCD display issues during conference
- Fixed LCD and web UI call status is not synchronized during operations such as adding contacts,
 recording, deleting participant during conference and etc
- Fixed device can add multicast listening without filling in IP address
- Fixed In web UI->Account->Call settings, Call Forward time interval format error prompt is not specific
- Fixed After device uses 3.5mm AUX to connect to a cellphone, the cellphone acts as a member in the conference but it can be deleted
- Fixed device connected with a Bluetooth headset has a delay when dialing number
- Fixed device will change hardware version when recovering a backup obtained from a different hardware version device