GXW4216/GXW4224/GXW4232/GXW4248

Firmware Release Notes

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FIRMWARE VERSION 1.0.5.28

PRODUCT NAME

GXW4216, GXW4224, GXW4232, GXW4248

DATE

11/03/2017

ENHANCEMENT

- Added option "Caller ID Display" to specify the priority for caller ID display. [Caller ID Display]
- Added option to save syslog locally. [Save Syslog]
- Added option "Prefer Primary Outbound Proxy" to enable registration through primary outbound proxy if registration expires. [Prefer Primary Outbound Proxy]
- Added feature "White list for WAN side" and "Black list for WAN side" for remote management. [Access Control Lists]
- Added feature" Lockout time interval" to change banning time after too many failed login attempts. [Lockout time interval]
- Added option "Web Access Mode" to choose between "HTTPS" and "HTTP" to access device Web UI. [Web Access Mode]
- Added option "HTTPS Web Port" to set HTTPS web port instead of using default web port. [HTTPS Web Port]
- Added "Backup Outbound Proxy" to use backup outbound proxy if outbound proxy registration expires. [Backup Outbound Proxy]
- Added local firmware upgrade support. [Upload Device Firmware]
- Change "Disable Telnet" option to "Disable SSH" option for more security.

BUG FIX

- Fixed device randomly cannot handle a second call made immediately after a completed one.
- Fixed when device initiates a call to a phone, and the phone forward the call to external number, the call is established and get disconnected after 30 seconds.
- Fixed device doesn't' send out DTMF via RFC2833 during early media (183 session progress)
- Fixed when device enable hunting group, when made a second call to any extension for the hunting group, could not hear busy tone.
- Fixed crash issue with core dump.
- Patch from Lantiq to provide locking mechanism for CONNECTION module.
- Fixed device does not unregister from SIP server.
- Fixed when an outbound proxy is configured and enable FXO failover option, device sends the Invite message to outbound proxy IP address instead FXO failover IP address.
- Fixed FXO Failover after N Invites without response
- Fixed DUT failed make more than 11 calls with hunting group

- Fixed GXW 4248 crashed and generated a core dump
- Fixed GXW4224 crashes and generates a core dump and loses dial tone
- Fixed DUT sends DNS queries every 30 minutes to resolve SIP server name
- Fixed DUT failed to start fax when T38 SDP includes T38maxBitRate:0
- Fixed there is no sound in a call when IP Address Mode is PPPoE
- Fixed DUT would not send REGISTER even it receives DNS response
- Fixed DUT prompt wrong IP address in IVR when using static IP address
- Fixed DUT loses dial tone randomly

NEW FEATURES OVERVIEW

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

Caller ID Display

- **Web Configuration**

User can find the configuration in Web UI -> Profiles -> Basic Settings.

- **Functionality**

When set to "Auto", the phone will look for the caller ID in the order of P-Asserted Identity Header, Remote-Party-ID Header and From Header in the incoming SIP INVITE. When set to "Disabled", all incoming calls are displayed with "Unavailable". When set to "From Header", the phone will display the caller ID based on the From Header in the incoming SIP INVITE. The default setting is "Auto".

- **New P Values**

Pvalue	Description	Value range	Default
P2324	Caller ID Display. (Profile 1)	0 – Auto 1 – Disabled 2 – From Header	0 – Auto
P2424	Caller ID Display. (Profile 2)	0 – Auto 1 – Disabled 2 – From Header	0 – Auto
P2524	Caller ID Display. (Profile 3)	0 – Auto 1 – Disabled 2 – From Header	0 – Auto

P2624	Caller ID Display. (Profile 4)	0 – Auto	0 – Auto
		1 – Disabled	
		2 – From Header	

Save Syslog

- **Web Configuration**

User can find the configuration in Web UI -> Maintenance -> Syslog.

- **Functionality**

Allow users to save syslog locally.

- **New P Values**

Pvalue	Description	Value range	Default
P28100	Save Syslog	0 - No 1 – Yes	0 – No

Prefer Primary Outbound Proxy

- **Web Configuration**

User can find the configuration section at Web -> Profiles -> General Settings.

- **Functionality**

Allow users to enable "Prefer Primary Outbound Proxy" feature. If the user configures this option to "Yes", when registration expires, the device will reregister via primary outbound proxy. By default, this option is disabled.

- **New P Values**

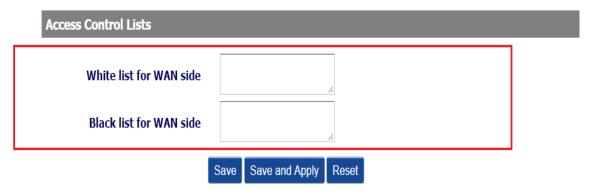| Pvalue	Description	Value range	Default
P28096	Prefer Primary Outbound Proxy. (Profile 1)	0 - No 1 – Yes	0 – No
P28097	Prefer Primary Outbound Proxy. (Profile 2)	0 - No	0 – No

		1 – Yes	
P28098	Prefer Primary Outbound Proxy. (Profile 3)	0 - No 1 – Yes	0 – No
P28099	Prefer Primary Outbound Proxy. (Profile 4)	0 - No 1 – Yes	0 – No

Access Control Lists

- **Web Configuration**

User can find the configuration section at Web -> Maintenance -> Web/SSH Access

- **Functionality**

"White list for WAN side" allows users to allow access specific IP address for WAN Side. "Black list for WAN side" allows users to block access for specific IP address.

New P Values

Pvalue	Description	Value range	Default
P20701	White list for WAN side	No specific requirement	Null
P20702	Black list for WAN side	No specific requirement	Null

Lockout time interval

- **Web Configuration**

User can find the configuration in Web UI -> Maintenance -> Web/SSH Access.

- **Functionality**

Allow users to change banning time interval after 5 attempts login with wrong password.

- **New P Values**

Pvalue	Description	Value range	Default
P1683	Lockout time interval	1 – 15 minutes	15 minutes

Web Access Mode

- **Web Configuration**

User can find the configuration in Web UI -> Maintenance -> Web/SSH Access.

HTTPS Web Port	443
Web Access Mode	○ HTTPS ● HTTP
Disable SSH	● No ○ Yes

- **Functionality**

Allow users to choose between "HTTPS" and "HTTP" to access device Web UI. By default, "HTTP" is selected.

- **New P Values**

Pvalue	Description	Value range	Default
P1650	Web Access Mode	0 – HTTPS 1 - HTTP	1 - HTTP

HTTPS Web Port

- **Web Configuration**

User can find the configuration in Web UI -> Maintenance -> Web/SSH Access.

HTTPS Web Port	443
Web Access Mode	○ HTTPS ● HTTP
Disable SSH	● No ○ Yes

- **Functionality**

Allow users to set HTTPS web port instead of using default HTTPS port.

- **New P Values**

Pvalue	Description	Value range	Default
P27010	HTTPS Web Port	1 - 65535	443

Backup Outbound Proxy

- **Web Configuration**

User can find the configuration section at Web -> Profiles -> General Settings.

- **Functionality**

If the user has configured backup outbound proxy, when the "Primary Outbound Proxy" registration fails, device will use the backup outbound proxy. By default, this field is left empty.

- **New P Values**

Pvalue	Description	Value range	Default
P2333	Backup Outbound Proxy. (Profile 1)	No specific requirement	Null
P2433	Backup Outbound Proxy. (Profile 2)	No specific requirement	Null
P2533	Backup Outbound Proxy. (Profile 3)	No specific requirement	Null
P2633	Backup Outbound Proxy. (Profile 4)	No specific requirement	Null

Upload Device Firmware

- **Web Configuration**

User can find the configuration section at Web -> Maintenance -> Upgrade and Provisioning.

- **Functionality**

Allow users to upload device firmware from local directory and update the device.

FIRMWARE VERSION 1.0.5.16

PRODUCT NAME

GXW4216/GXW4224/GXW4232/GXW4248

DATE

09/11/2015

ENHANCEMENT

- Added support for Spanish, French, and Chinese on the web UI->Call Features Settings page under all 4 profiles
- Added support for deleting core files from web UI
- Added improvement for inter-port and far end echo issue
- Added ability to upload device configuration file directly from the web UI
- Added busy tone when using current disconnect
- Added Germany to "Country specific deployment" list
- Added option to disable PnP SUBSCRIBE feature
- Added security improvement: Hide passwords from command line
- Added reboot timer feature
- Added web UI option to configure local RTP port
- Added option to hide IP address from LCD
- Added DHCP option 42 and DHCP option 2 support
- Added option to enable/disable Crypto life time when using SRTP
- Added configurable option to enable/disable Broadsoft Connected Line ID
- Added ability to customize dial tone when user does not enter any digit
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BUG FIX

- Fixed TX/RX low gain
- Fixed reboot device by unplugging network cable causes incoming IP call fail to establish
- Fixed GXW4248 has low audio gain and echo introduction compared to other GXW42xx models
- Fixed Number is lost in outgoing call
- Fixed web UI displays XXXXX
- Fixed crash issue with core voltage
- Fixed can retrieve any configuration value without authentication
- Fixed make a call with DUT and then DUT hangs up, another gateway device would hear echo 1s before busy tone
- Fixed when the third party is HT802 and the Vocoder is PCMA, no voice can be heard
- Fixed no prompt can be heard when HTTPS is selected via IVR
- Fixed DUT should change the IP on the LED once it gets a new one

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- Fixed the copyright time on telnet is not consistent with the one on web UI
- Fixed all ports suddenly stops working
- Fixed the port doesn't work after the phone holds many times
- Fixed DUT does not prompt that "Device not registered" via IVR in Chinese
- Fixed SIP Registration Failure Retry Wait Time is fixed in 20 minutes when receiving 403 Forbidden
- Fixed attended transfer failure
- Fixed SIP NOTIFY with "check-sync;reboot=false" event should not reboot the gateway
- Fixed device loses the ring tone cadence configuration after reboot
- Fixed NAPTR/SRV configuration is not applied on the fly unless reboot
- Fixed incoming call following attended transfer by Netsapiens Proxy is automatically terminated by the device
- Fixed gateway cannot be provisioned using zero config if the UCM binds different port from 5060
- Fixed timezone selection does not include DST definition
- Fixed cannot perform a second call after making transfer between two ports registered with the same extension
- Fixed devices fail to re-register if/when SIP realm is changed
- Fixed some P values cannot be blocked using P9999
- Fixed DUT will not send out SUBSCRIBE request after enable 3CX Auto Provision
- Fixed hunting group on fly change has logic flaw
- Fixed attended transfer sometimes fails

FIRMWARE VERSION 1.0.5.8

PRODUCT NAME

GXW4216/GXW4224/GXW4232/GXW4228

DATE

01/28/2015

ENHANCEMENT

- Added support for NAT transfer feature
- Increased "Dial Plan" field length to 2048 digits

BUG FIX

- Fixed crash issue with core dump
- Fixed missing P values when .txt or .xml configuration files are exported from the GXW
- Fixed device could get into a no dial tone state
- Fixed [TR-069] dateTime Type typo
- Fixed reset FXS port config from web GUI will disable FXS 1
- Fixed device rejected SIP reply from Outbound Proxy under some conditions
- Fixed Authenticate Conf File feature did not work
- Fixed could not set "Enable All" for "Enable Call Features" option in Profile2/3/4

FIRMWARE VERSION 1.0.5.5

PRODUCT NAME

GXW4216/GXW4224/GXW4232/GXW4228

DATE

10/01/2014

ENHANCEMENT

- Added passive SNMP support
- Added support for configurable star codes
- Added support for uploadable IVR packs
- Added support for XML configuration file download
- Added support for configurable TTL Value for Keep-Alive messages
- Added option "Enable Fast RFC2833" in web UI
- Added separate Tos/CoS settings for SIP and RTP
- Added support to announce registration number via feature code
- Added support for TTY/TDD
- Modified some options' value when display language on web UI is Chinese
- Added security table to factory sector to store certificate and private key
- Changed P-Asserted-Identity (PAI) header to P-Preferred-Identity (PPI) header in SIP INVITE
- Moved Download Configuration button under Upgrade and Provisioning web UI
- Added configurable RFC 3261 timer D length support
- Updated to latest data model + CPE 1.0.1.47

BUG FIX

- Fixed device crashes under performance test
- Fixed if sending DTMF slightly faster via RFC2833, device does not send the end RTP event of DTMF
- Fixed device fails to handle multiple m lines in SDP correctly causing incoming call fail
- Fixed delay when registering to Failover Server
- Fixed if SRTP Mode set to Enabled and Forced, callee cannot hear anything right after off-hook
- Fixed even if P251 value is larger than P252, it can still be saved
- Fixed null dial plan can be saved and applied
- Fixed using inexpensive analog phones, sometimes there is ringing delay, or no ringing at all
- Fixed device port gets locked and has to be rebooted for the port to become operational again
- Fixed losing digits when sending out DTMF digits
- Fixed port 47 off-hook and on-hook constantly, after a while port 48 behaves the same under certain conditions

- Fixed SIP server and Outbound Proxy cannot be configured with host address like x.x.x.0
- Fixed sometimes couldn't make a call, but after a while device will work again
- Fixed one port cannot use, if off-hook can hear busy signal under certain conditions
- Fixed device registered to outside SIP server remotely, SIP server does not receive Register request
- Fixed network change while rebinding sockets will cause socket rebind infinite loop

FIRMWARE VERSION 1.0.4.24

PRODUCT NAME

GXW4216/GXW4224/GXW4232/GXW4228

DATE

08/13/2014

ENHANCEMENT

- Changed P-Asserted-Identity (PAI) header to P-Preferred-Identity (PPI) header in SIP INVITE
- Added support to play the registration number via *98 feature code

BUG FIX

- Fixed GXW4248 low audio gain/Echo compared to other GXW42xx models
- Modified some web UI option value when display language on web page is Chinese
- Fixed with certain analog phones sometimes there is delayed ringing, or no ringing at all
- Fixed losing digits when sending out DTMF digits
- Fixed device fails to handle multiple m lines in SDP correctly causing incoming call fail
- Fixed delay when register to failover server
- Fixed system memory exhaustion in early media calls

FIRMWARE VERSION 1.0.4.22

PRODUCT NAME

GXW4216/GXW4224/GXW4232/GXW4228

DATE

05/30/2014

ENHANCEMENT

- Added option "Do Not Escape '#' as %23 in SIP URI" in web UI
- Added TR-069 ACS Discovery Support
- Added G722 WB support
- Added support to display CPE version in Web UI status page
- Added support to allow up to 256 characters in config server path
- Added support for Distinctive ringtones using Alert-info string
- New CPE version 1.0.1.44

BUG FIX

- Fixed device fails to handle multiple m lines in SDP correctly causing incoming call fail
- Fixed HTTP GET provisioning request displays HTTP username/password in plain text. Added web UI option "Always Authenticate Before Challenge"
- Fixed TR-069: add Keep-alive Interval in Parameter tree
- Fixed TR-069: Firmware upgrade using HTTPS with authentication fail
- Fixed TR-069: Parameter Tree error
- Fixed GXW4248: (TR069) in parameter tree only have 32 lines
- Fixed STUN call has no RTP
- Fixed default IP configuration issue
- Fixed GXW4224/GXW4248 - Ports will "hang" after some time
- Fixed TR-069: Gain parameters not positioned correctly in data model
- Fixed device crashes randomly in all ports, no dial tone in any port
- Fixed if P143 is set to No with DHCP OPTION 2 device still accepts the time offset
- Fixed Caller ID Issue
- Fixed port stuck during T.38 fax
- Fixed device adds SUBSCRIBES messages to multicast address from AA product
- Fixed Metaswitch interop: Blind transfer fail, then reconnect
- Fixed device gets into reboot loop
- Fixed after downloading config file from customers server, device became dead after 2 days
- Fixed TR-069: Each account under Session the sub-tree lost data

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- Fixed TR-069: Voice Profile node 2/3/4 Line tree node sub-tree missing data
- Fixed TR-069: A still send syslog information when Syslog Level is none
- Fixed device cannot handle SIP message with contact header whose contact-URI does not have angle brackets surrounding it

FIRMWARE VERSION 1.0.4.17

PRODUCT NAME

GXW4216/GXW4224/GXW4232/GXW4228

DATE

12/19/2013

ENHANCEMENT

- Added support for ping/traceroute tools for network connectivity
- Added support to send SUBSCRIBE messages to multicast address

BUG FIX

- Fixed applying the Payload Type value will not take effect without reboot
- Fixed Call Waiting using PCMU while device is forced to use PCMA
- Fixed device sends REGISTER requests to Failover SIP Server even though it has successfully registered to Primary SIP Server
- Fixed crash issue caused by SUBSCRIBE for MWI

FIRMWARE VERSION 1.0.4.15

PRODUCT NAME

GXW4216/GXW4224/GXW4232/GXW4228

DATE

12/04/2013

ENHANCEMENT

- Added support to use SIP request URI user ID for outgoing calls
- Added option when using DID to call, the From header is DID number
- Added three new IVRs: ◦ Device not registered
- Internet service is down…
- Cable unplugged...

BUG FIX

- Fixed device sent re-register request every 20 seconds after server responded 403
- Fixed Dial Tone cadence did not change
- Fixed TR069 - after upgrade via ACS cannot upgrade via web UI
- Fixed when DNS server and gateway are unreachable, device on/off hook detection will be delayed by 20s during DNS request period
- Fixed cannot dial 0 when using pulse dialing
- Fixed when device is caller it didn't send Comfort Noise
- Fixed register expiration issue

FIRMWARE VERSION 1.0.4.9

PRODUCT NAME

GXW4216/GXW4224/GXW4232/GXW4228

DATE

12/06/2013

BUG FIX

- Fixed in basic call, after hold and unhold, device repeats sending ReINVITE
- Fixed rebooting device fails to download bbd
- Fixed device crash issue related to STUN
- Fixed BroadSoft interop: device cannot switch between two lines after receiving NOTIFY
- Fixed the LED does not blink while downloading XML config file
- Fixed English and Chinese translation issue
- Fixed changing Hunting Group type does not take effect for the first call
- Fixed if unplugged network cable then reboot, device uses 192.168.254.2 as DNS server
- Fixed device crash issue associated with changing SIP transport during server failover DNS process
- Fixed IP mode mismatch issue as a result of changing IP mode via IVR then disconnect and reconnect network cable
- Fix a memory leak issue related to MWI and phone in offhook state
- Fixed GXW4232 FXS port becomes inactive after performance tests for 5 days
- Fixed BroadSoft interop: device fails to play local ring-back tone and fails to deliver CID when use # key as dial key
- Fixed "Copyright © Grandstream Networks, Inc. 2013. All Rights Reserved." was not translated into Spanish for Spanish language display
- Fixed device does not use Backup IP to register with SIP over TCP/TLS
- Fixed device creates extra call object leading to one channel stuck in CALL_ENDING causing no more incoming phone call unless device off/on hook
- Fixed device does not reboot after upgrading if network cable was unplugged

FIRMWARE VERSION 1.0.4.7

PRODUCT NAME

GXW4216/GXW4224/GXW4232/GXW4228

DATE

08/09/2013

ENHANCEMENT

- Added LLDP Support
- New P value for LLDP support P1684 - Enable LLDP
- Added support for receiving TCP/TLS "\r\n" keep-alive messages

BUG FIX

- Fixed DUT ringing doesn't timeout
- Fixed Hook status show Not Registered
- Fixed Change the Enable Hook Flash value cannot come into effect without reboot
- Fixed Cannot change Use Configured IP without reboot
- Fixed Some settings cannot come into effect if not saving and applying with another values
- Fixed Preferred Vocoder 7/8 cannot take effect without reboot
- Fixed Device does not follow record route header route
- Fixed Change the vocoder via IVR cannot come into effect in new profile
- Fixed outgoing call with enable use configured IP cause crash
- Fixed oSIP bug that the port in a response is not set properly if not explicitly specified in the Via header for TLS transport
- Fixed TLS block read issue where the read may not return the complete message
- Fixed Display language not translate into Chinese/French/Spanish
- Fixed LLDP default value is different between factory reset and reset via web UI
- Fixed Enable Call Features error in Chinese translation
- Fixed Factory reset via telnet have no reboot info
- Fixed Enable provider lock via config file need to reboot to take effect
- Fixed Make an anonymous call under TLS mode can cause CPU usage high

FIRMWARE VERSION 1.0.4.4

PRODUCT NAME
GXW4216/GXW4224/GXW4232/GXW4228

DATE
06/28/2013

ENHANCEMENT

- Added support for call routing based on SIP request URI user ID
- Added support to display Connected Line ID
- Added support for ASCII in DID field
- Added support to set LCD language from the web UI under system features
- Added support for compact session timer header
- Added support for LCD GUI
- Added option to disable SIP NOTIFY Authentication
- Added support for interrupt driven FAN failure control
- Added support to reset only Basic Settings values via
- Added LLDP support
- Added support for factory reset in recovery mode
- Added support for Chinese + Spanish + French Web UI
- Added VLAN support
- Added support to authenticate incoming INVITE
- Added support to reboot via SIP NOTIFY
- Added support for upgrading second bootloader via single image file

BUG FIX

- Fixed Dial plan does not allow $ and P signs
- Fixed Broadsoft Interop: Connected Line ID is not updated after Call Transfer or Call Forward
- Fixed Broadsoft Interop: device does not update "anonymous" with "Privacy:id"
- Fixed BroadSoft Interop: device fails to handle INVITE with Diversion Inhibitor
- Fixed BroadSoft Interop: REGISTER Failback is not send to the primary server
- Fixed BroadSoft Interop: fax pass-through fails with re-INVITE
- Fixed device does not parse the SDP included in the 181 message
- Fixed Offhook Autodial allows invalid input
- Fixed Dial Plan does not accept ABCD
- Fixed Time Zone via reset button does not reset to default value
- Fixed call between force enable SRTP and disable SRTP have one-way audio

- Fixed Spanish and French Web UI words display error
- Fixed device cannot boot up without network connection
- Fixed LCD back light does not work

FIRMWARE VERSION 1.0.3.9

PRODUCT NAME

GXW4216/GXW4224/GXW4232/GXW4228

DATE

06/06/2013

ENHANCEMENT

- Added VLAN support
- Added Spanish, French and Chinese language support
- Added support to display Connected Line ID
- Added support to authenticate incoming INVITE
- Added LCD GUI
- Added support to reboot device via SIP NOTIFY

BUG FIX

- Fixed web browser compatible issues
- Fixed firmware/Config file Prefix/Suffix do not accept special characters
- Fixed unit cannot boot up without network connection
- Fixed TX/RX gain to indicate audio between the FXS and the network and remove ambiguity
- Fixed setting value to blank via xml file causes device crash
- Fixed fax returns to call issue
- Fixed noise on hold under special scenario
- Fixed Use Configured IP cannot set domain name and IP+port
- Fixed cfg file provisioning causes device reboots
- Fixed recovery mode issues
- Fixed BroadSoft special feature issues
- Fixed fax pass-through issue
- Fixed callee ringing timeout causes device crash
- Fixed iLBC payload type in 127 has no audio
- Fixed ringing does not timeout
- Fixed IP call causes device crash
- Fixed no IVR issue

- Fixed dial plan { [*x#]+ } causes call feature function fails

- Fixed Hunting Group setting issue
- Fixed in call flash causes device crash