

GXW4216 V2/GXW4224 V2/GXW4232 V2/GXW4248 V2

Firmware Release Notes

IMPORTANT UPGRADING NOTE

- Once the GXW4224/GXW4232/GXW4248 V2 device 1.0E is upgraded to 1.0.29.6, it cannot be downgraded to 1.0.27.3 or an earlier version.
- Once the GXW42xx V2 device is upgraded to 1.0.7.2, it cannot be downgraded to 1.0.5.4 or an earlier version due to the addition of 2nd generation individual certificates.
- GXW42xx V2 device uses a different firmware file from the GXW42xx V1 device. Please use the correct firmware file for V1 and V2 devices. To distinguish GXW42xx V2 device from V1 device, please check the label on the back of the device.
 - (1) GXW42xx V2 has "V2" printed for model name. For example, "Model: GXW4216 V2". If the model's name doesn't have V1 or V2 printed, the device is GXW42xx V1.
 - (2) GXW42xx V2 has the device password printed on the label. GXW42xx V1 does not have it.
- For GXW42xx V2 device on 1.0.1.4 or earlier version to upgrade to 1.0.3.4+, the HTTP firmware upgrade path is:
[firmware.grandstream.com/GXW42xx V2 1.0.3.9 for fw 1.0.1.4 or lower](http://firmware.grandstream.com/GXW42xx_V2_1.0.3.9_for_fw_1.0.1.4_or_lower)

After upgrading to 1.0.3.9, you can upgrade to latest firmware using HTTP firmware path:
firmware.grandstream.com
- Once the GXW42xx V2 device is upgraded to 1.0.3.x, it cannot be downgraded to 1.0.2 x or earlier version.

Table of Content

IMPORTANT UPGRADING NOTE	1
FIRMWARE VERSION 1.0.31.2	7
PRODUCT NAME.....	7
DATE	7
FIRMWARE FILE INFORMATION	7
ENHANCEMENT	7
BUG FIX	7
NEW FEATURES OVERVIEW	8
<i>OpenVPN TLS Key</i>	<i>8</i>
<i>Routing ID Matching Type</i>	<i>9</i>
<i>Validate Hostname in Certificate</i>	<i>10</i>
<i>Maximum Transmission Unit (MTU)</i>	<i>10</i>
FIRMWARE VERSION 1.0.29.9	11
PRODUCT NAME.....	11
DATE	11
FIRMWARE FILE INFORMATION	11
ENHANCEMENT	11
BUG FIX	11
FIRMWARE VERSION 1.0.29.7	12
PRODUCT NAME.....	12
DATE	12
FIRMWARE FILE INFORMATION	12
ENHANCEMENT	12
BUG FIX	12
NEW FEATURES OVERVIEW	13
<i>Subscribe Retry Wait Time upon 403 Forbidden.....</i>	<i>13</i>
<i>Special Auto Dial Number for an Incomplete Dial by User.....</i>	<i>13</i>
<i>Re-INVITE Upon CNG Count</i>	<i>14</i>
<i>OpenVPN® Server Secondary</i>	<i>14</i>
FIRMWARE VERSION 1.0.27.3	16
PRODUCT NAME.....	16
DATE	16
FIRMWARE FILE INFORMATION	16

ENHANCEMENT	16
BUG FIX	17
NEW FEATURES OVERVIEW	17
<i>Switch SIP Server When Keep-Alive Max Lost Is Reached</i>	17
<i>Conference Notification Tone</i>	17
<i>Remote On Hold Tone</i>	18
<i>Ringing Transfer</i>	18
<i>RTP/RTCP Keep Alive On Hold</i>	19
<i>OpenVPN Username/Password</i>	19
<i>Static DNS</i>	20
<i>Strict Password Rules</i>	29
<i>Secondary NTP server</i>	30
<i>Local Time</i>	30
<i>T.38 Max Bit Rate</i>	31
FIRMWARE VERSION 1.0.25.2	32
PRODUCT NAME	32
DATE	32
FIRMWARE FILE INFORMATION	32
ENHANCEMENT	32
BUG FIX	32
FIRMWARE VERSION 1.0.25.1	33
PRODUCT NAME	33
DATE	33
FIRMWARE FILE INFORMATION	33
ENHANCEMENT	33
BUG FIX	33
FIRMWARE VERSION 1.0.23.2	34
PRODUCT NAME	34
DATE	34
FIRMWARE FILE INFORMATION	34
ENHANCEMENT	34
BUG FIX	34
NEW FEATURES OVERVIEW	34
<i>Keep Security Setting After Reset</i>	34
FIRMWARE VERSION 1.0.21.2	36
PRODUCT NAME	36
DATE	36

FIRMWARE FILE INFORMATION	36
ENHANCEMENT	36
BUG FIX	36
FIRMWARE VERSION 1.0.19.1	37
PRODUCT NAME.....	37
DATE	37
FIRMWARE FILE INFORMATION	37
ENHANCEMENT	37
BUG FIX	37
NEW FEATURES OVERVIEW	38
<i>AVS DTMF Detector Parameters</i>	38
<i>Use P-Early-Media Header</i>	39
<i>Ringback Tone at No Early Media</i>	39
<i>RADIUS Auth Protocol</i>	40
<i>Lock/Unlock Extension Code</i>	41
FIRMWARE VERSION 1.0.17.1	42
PRODUCT NAME.....	42
DATE	42
FIRMWARE FILE INFORMATION	42
ENHANCEMENT	42
BUG FIX	42
NEW FEATURES OVERVIEW	43
<i>Replace the beginning '+' in Caller ID with</i>	43
FIRMWARE VERSION 1.0.15.2	44
PRODUCT NAME.....	44
DATE	44
FIRMWARE FILE INFORMATION	44
ENHANCEMENT	44
BUG FIX	44
NEW FEATURES OVERVIEW	44
<i>Custom DTMF InBand Duration</i>	44
FIRMWARE VERSION 1.0.13.2	46
PRODUCT NAME.....	46
DATE	46
FIRMWARE FILE INFORMATION	46
ENHANCEMENT	46
BUG FIX	46

NEW FEATURES OVERVIEW	47
<i>MWI Tone</i>	47
<i>Special Proceed Indication Tone</i>	47
<i>Special Condition Tone</i>	48
<i>Ignore Alert-Info Header</i>	48
FIRMWARE VERSION 1.0.11.2	49
PRODUCT NAME	49
DATE	49
FIRMWARE FILE INFORMATION	49
ENHANCEMENT	49
BUG FIX	49
NEW FEATURES OVERVIEW	50
<i>Download and Process All Available Config Files</i>	50
FIRMWARE VERSION 1.0.9.1	51
PRODUCT NAME	51
DATE	51
FIRMWARE FILE INFORMATION	51
ENHANCEMENT	51
BUG FIX	51
FIRMWARE VERSION 1.0.7.2	52
PRODUCT NAME	52
DATE	52
FIRMWARE FILE INFORMATION	52
ENHANCEMENT	52
BUG FIX	52
NEW FEATURES OVERVIEW	53
<i>Configuration File Types Allowed</i>	53
<i>Additional Override DHCP Option</i>	53
<i>S RTP Key Length</i>	54
<i>With Secret Key Information</i>	54
<i>Security Controls for SSH Access</i>	55
<i>Enable using tags in URL</i>	55
FIRMWARE VERSION 1.0.5.4	56
PRODUCT NAME	56
DATE	56
FIRMWARE FILE INFORMATION	56
ENHANCEMENT	56

BUG FIX	56
NEW FEATURES OVERVIEW	57
<i>Enable SNMP Through Management Interface</i>	57
<i>Enable Syslog Through Management Interface</i>	57
FIRMWARE VERSION 1.0.3.9	59
PRODUCT NAME	59
DATE	59
FIRMWARE FILE INFORMATION	59
BUG FIX	59
FIRMWARE VERSION 1.0.3.4	60
PRODUCT NAME	60
DATE	60
FIRMWARE FILE INFORMATION	60
ENHANCEMENT	60

FIRMWARE VERSION 1.0.31.2

PRODUCT NAME

GXW4216 V2, GXW4224 V2, GXW4232 V2, GXW4248 V2

DATE

07/03/2025

FIRMWARE FILE INFORMATION

- GXW4216 V2 firmware file name: gxw4216v2fw.bin
MD5: 304fd6f7987ab68ce4a695c2c45e2fcf
- GXW4224 V2 firmware file name: gxw4224v2fw.bin
MD5: fafa5f356a0a64df7c3ad418e17ccb0f
- GXW4232 V2 firmware file name: gxw4232v2fw.bin
MD5: f6b912c257ec5071b94be21314f9e687
- GXW4248 V2 firmware file name: gxw4248v2fw.bin
MD5: edce15042bd8ba8af7f05ecbc5a8360b

ENHANCEMENT

- Added support for OpenVPN TLS Key. [OpenVPN TLS Key]
- Added support for remote access to WebUI via GDMS.
- Added support for the Israel time zone with daylight saving time (DST).
- Enhanced Hunting Group Ringing Strategies.
- Added new option "2 - Parallel" to Hunting Group Type (P4395/4396/4397/4398).
- Update the name of "Request URI Routing ID" (P4669-4700, P21704-21719) to "Routing ID".
- Added support for assigning multiple DIDs per FXS port. [Routing ID Matching Type]
- Added the ability to save time to the timefile periodically.
- Added support for hostname validation in certificates. [Functionality]
- This feature allows users to configure the different Routing ID Matching Types.

- **New P Values**

Pvalue	Description	Value Range	Default
28859	Routing ID Matching Type	Number:	0 - Request URI
-		0 - Request URI	
28906		1 - To Header	

- Validate Hostname in Certificate]
- Added support for the MTU feature. [Maximum Transmission Unit (MTU)]

BUG FIX

- Fixed an issue where call transfers would drop after one minute.
- Fixed the device showing LCD "ff: VoIP Failed" and "IP Changed" Errors.
- Fixed call hold failure after attended transfer when SRTP is forced and enabled.
- Fixed SRTP re-negotiation failure during call forwarding, which caused disconnections.
- Fixed error prompts when modifying network connection settings from the login screen.
- Fixed issue where the device could not change passwords via ACS.
- Fixed failure to download the cfg file when triggering from the Metaswitch portal.
- Fixed "VoIP failed" message during provisioning.
- Fixed malformed DHCP Packets.
- Fixed incorrect CSeq tracking and decrementing during call forking.
- Fixed issue where the device sent INVITE to the incorrect proxy.
- Fixed outbound call retry failure when the primary outbound proxy was unreachable.
- Fixed TLS call failure due to domain name authentication issue, which caused SigControl to hang and the call to not release properly.
- Fixed issue where the device failed to validate the certificate with the outbound proxy.
- Fixed issue where devices with failback enabled attempted failback during active calls.
- Fixed DNS SRV failover failure when "Check Domain Certificates" is enabled.
- Fixed a device crash issue.
- Fixed failure to obtain IP address via PPPoE.
- Fixed issue where the device would automatically send BYE a few seconds after receiving a PSTN call.
- Fixed an issue with fax sending failure.

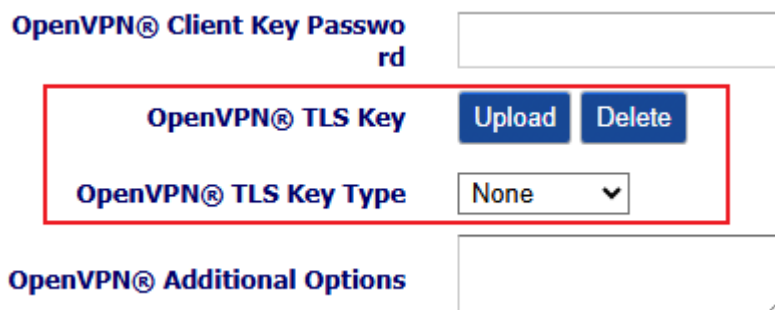
NEW FEATURES OVERVIEW

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

OpenVPN TLS Key

- **Web Configuration**

Users can find the configuration section in Web -> Maintenance -> VPN-> OpenVPN® Settings.



OpenVPN® Client Key Password

OpenVPN® TLS Key

OpenVPN® TLS Key Type ▼

OpenVPN® Additional Options

- **Functionality**

This feature allows users to configure the OpenVPN® TLS Key and OpenVPN® TLS Key type.

- **New P Values**

Pvalue	Description	Value Range	Default
22371	OpenVPN® TLS Key	String: Max Length: 8192	(Null)
22457	OpenVPN® TLS Key Type	Number: 0 – None, 1 – TLS-Auth, 2 – TLS-Crypt.	0 - None

Routing ID Matching Type

Users can find the configuration section in Web -> FXS Ports->Advanced Port Settings.

Routing ID	Routing ID Matching Type
	Request URI ▼
	Request URI ▼
	Request URI ▼
	Request URI ▼
	Request URI ▼
	Request URI ▼
	Request URI ▼
	Request URI ▼
	Request URI ▼
	Request URI ▼
	Request URI ▼
	Request URI ▼
	Request URI ▼
	Request URI ▼
	Request URI ▼
	Request URI ▼
	Request URI ▼
	Request URI ▼
	Request URI ▼

- **Functionality**

This feature allows users to configure the different Routing ID Matching Types.

- **New P Values**

Pvalue	Description	Value Range	Default
28859 - 28906	Routing ID Matching Type	Number: 0 - Request URI 1 - To Header	0 - Request URI

Validate Hostname in Certificate

- **Web Configuration**

Users can find the configuration section in Web -> Maintenance -> Upgrade and Provisioning.

Always send HTTP Basic Authentication Information
☐ Yes ☒ No

Validate Hostname in Certificate
☐ Yes ☒ No

Upgrade via
☐ TFTP ☒ HTTP ☐ HTTPS ☐ FTP ☐ FTPS

- **Functionality**

This feature allows users to configure the Validate Hostname in Certificate. Users could validate the hostname in the SSL certificate.

- **New P Values**

Pvalue	Description	Value Range	Default
22030	Validate Hostname in Certificate	Number: 0 – No, 1 – Yes.	0 – No

Maximum Transmission Unit (MTU)

- **Web Configuration**

Users can find the configuration section in Web -> Maintenance -> Network Settings->Advanced Network Settings.

Advanced Network Settings

Maximum Transmission Unit (MTU)

- **Functionality**

This feature allows users to configure the Maximum Transmission Unit (MTU). User could configure the

MTU in bytes. The default value is 1500 bytes, and the Range is 576-1500 bytes.

- **New P Values**

Pvalue	Description	Value Range	Default
244	Maximum Transmission Unit (MTU)	Number: 576 –1500	1500

FIRMWARE VERSION 1.0.29.9

PRODUCT NAME

GXW4216 V2, GXW4224 V2, GXW4232 V2, GXW4248 V2

DATE

04/22/2025

FIRMWARE FILE INFORMATION

- GXW4216 V2 firmware file name: gxw4216v2fw.bin
MD5: 067dcc88ce74f841fbb8b8f35f6de50f
- GXW4224 V2 firmware file name: gxw4224v2fw.bin
MD5: aa895abcd5dad3bed8b067057356dae8
- GXW4232 V2 firmware file name: gxw4232v2fw.bin
MD5: e465a79e50d8173ffdaeba4d7e475234
- GXW4248 V2 firmware file name: gxw4248v2fw.bin
MD5: 9a368a6ede604810f625d0661655ecb2

ENHANCEMENT

- Added the ability to detect the connection status of FXS ports.
- Implemented security enhancements for GXW devices.

BUG FIX

- Fixed issues with the SR140 faxing platform.
- Fixed the device is not using DNS replies.
- Fixed Zoom ZPLS issues on the GXW42xx V2.

FIRMWARE VERSION 1.0.29.7

PRODUCT NAME

GXW4216 V2, GXW4224 V2, GXW4232 V2, GXW4248 V2

DATE

01/20/2025

FIRMWARE FILE INFORMATION

- GXW4216 V2 firmware file name: gxw4216v2fw.bin
MD5: fb38570600f3c4483a0c4ed4b1d13890
- GXW4224 V2 firmware file name: gxw4224v2fw.bin
MD5: ae6259ef1f4c996b140fe1529a01826c
- GXW4232 V2 firmware file name: gxw4232v2fw.bin
MD5: 1bea06b622e212e200c9258410050014
- GXW4248 V2 firmware file name: gxw4248v2fw.bin
MD5: e42db06e096bafcaa59ecb38be4b36a1

ENHANCEMENT

- Added support for Firmware Upgrade Via Resync SIP NOTIFY.
- Added the "Enable/Disable Access" option to the LCD Menu. (LCD->Settings->Advance Settings->Security-> Enable/Disable Access)
- Added support for Subscribe Retry Wait Time upon 403 Forbidden. [Subscribe Retry Wait Time upon 403 Forbidden]
- Added support for a "No Key Offhook Auto-dial number" field to trigger off-hook auto-dial when uncompleted numbers. [Special Auto Dial Number for an Incomplete Dial by User]
- Renamed "OnHook DC Feed Current" (P28192/28193/28194/28195) to "Maximum DC Feed Current".
- Added support to initiate a Re-Invite for fax transmission when the fax machine is the sender. [Re-INVITE Upon CNG Count]
- Updated "Blacklist" to "Block list".
- Added support OpenVPN® failover option. [OpenVPN® Server Secondary]
- Security enhancements for GXW devices.
- Removed unnecessary files to optimize firmware size.

BUG FIX

- Fixed a bug that caused the blind transfer not to work.
- Fixed device could hear the voicemail reminder with the Offhook Auto-dial enabled.
- Fixed an issue caused by failure to apply the configuration using an XML template.
- Fixed: OpenVPN settings do not remain after turning off the device.
- Fixed the WebUI access issues due to caching.
- Fixed device failed to look up the internal DNS record.
- Fixed device does not Pulse dial correctly out of FX2 when using Swedish protocol.
- Fixed device fails due to a segmentation fault (SIGSEGV) during SIP registration.

NEW FEATURES OVERVIEW

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

Subscribe Retry Wait Time upon 403 Forbidden

- **Web Configuration**

Users can find the configuration section in Web -> Profile -> SIP Settings-> Basic Settings.



- **Functionality**

This feature allows users to configure the Subscribe Retry Wait Time upon 403 Forbidden. This specifies the wait time to retry subscribe after receiving 403 Forbidden. The valid range is 0 to 10080 minutes; the default is 0. If the value is not 0, the device will retry 10 times first, then wait for the specified time before trying again. If the value is 0, the device will follow the "Retry-After" header if present. Otherwise, the device will wait 20 minutes before subscribing again.

Pvalue	Description	Value Range	Default
60068 60168 60268 60368	Subscribe Retry Wait Time upon 403 Forbidden	Number: 0 - 10080	0

Special Auto Dial Number for an Incomplete Dial by User

- **Web Configuration**

Users can find the configuration section in Web -> Profile -> Call Settings.

Off-Hook Auto-Dial Delay

Special AutoDial number for an incomplete dial by user

- **Functionality**

This feature allows users to configure the Special AutoDial number for an incomplete dial by user. This number will be dialed if the dialed number is incomplete as per dialplan rules and no key entry has timed out.

Pvalue	Description	Value Range	Default
28918	Special AutoDial number for an incomplete dial by user	String: Maximum length: 64 characters	(Null)
28919			
28920			
28921			

Re-INVITE Upon CNG Count

- **Web Configuration**

Users can find the configuration section in Web -> Profile -> Fax Settings.

Send Re-INVITE After Fax Tone ☐ No ☒ Yes

Re-INVITE Upon CNG Count

- **Functionality**

This feature allows users to configure the Re-INVITE Upon CNG Count. If the value is 0, this feature is disabled; if the value is equal to or greater than 1, ATA will initiate a Re-Invite request when the CNG count is reached. The valid range is [0, 6].

Pvalue	Description	Value Range	Default
28923	Re-INVITE Upon CNG Count	Number: 0 - 6	0
28924			
28925			
28926			

OpenVPN® Server Secondary

Users can find the configuration section in Web -> Maintenance-> VPN.

OpenVPN® Server Secondary Address

OpenVPN® Secondary Port

Randomly Select Server ☐ Yes ☒ No

- **Functionality**

This feature allows users to configure the OpenVPN® Server Secondary Address for the failover. The user could set the OpenVPN® Server Secondary Address and Port and decide if to enable the Randomly Select Server. If it is enabled, a server will be randomly selected in the configuration to start OpenVPN® requests. If closed, requests will be made in the order of server configuration.

Pvalue	Description	Value Range	Default
22597	OpenVPN® Server Secondary Address	String: Maximum length: 253 characters	(Null)
22598	OpenVPN® Secondary Port	Number: 1 - 65535	1194
22599	Randomly Select Server	Number: 0 – No 1 – Yes	0 - No

FIRMWARE VERSION 1.0.27.3

PRODUCT NAME

GXW4216 V2, GXW4224 V2, GXW4232 V2, GXW4248 V2

DATE

10/03/2024

FIRMWARE FILE INFORMATION

- GXW4216 V2 firmware file name: gwx4216v2fw.bin
MD5: 954ac073c0331f119b6140c629ada415
- GXW4224 V2 firmware file name: gwx4224v2fw.bin
MD5: 99ed18991ad2fb6eb73467cf98e5a45d
- GXW4232 V2 firmware file name: gwx4232v2fw.bin
MD5: cf66dfebbba42c0ed7afcc9cda5aa802
- GXW4248 V2 firmware file name: gwx4248v2fw.bin
MD5: 034eafd51f3870d82f2ad1c7b0738119

ENHANCEMENT

- Added support to Enable/Disable WEB access through the IVR.
- Added support for the “Switch SIP Server When Keep-Alive Max Lost Is Reached”. [Switch SIP Server When Keep-Alive Max Lost Is Reached]
- Added support for Conference Notification Tone. [Conference Notification Tone]
- Added support for Remote On Hold Tone. [Remote On Hold Tone]
- Added support for Ringing Transfer. [Ringing Transfer]
- Added RTCP keep alive feature. [RTP/RTCP Keep Alive On Hold]
- Added ability to support Authentication based on Username/Password on OpenVPN. [OpenVPN Username/Password]
- Added support to configure static DNS SRV records. [Static DNS]
- Removed the complex admin password requirements.
- Added support for the Strict Password Rules. [Strict Password Rules]
- Added support Add XMPP-based connection request.
- Added support for the secondary NTP server. [Secondary NTP server]
- Added ability to set local date and time. [Local Time]
- Added support for setting the T.38 Max Bit Rate. [T.38 Max Bit Rate].
- Update the “SIP Registration Failure Retry Wait Time upon 403 Forbidden” max values to 10080 minutes.
- Added support to save syslog settings and internal logs across a factory reset. P82307 Syslog Setting and Internal Logs Protection. (0- No, 1- Yes. The default is 0. Check the config template for details).

BUG FIX

- Fixed device couldn't failover to the secondary SIP server when the shorter timer is set up.
- Fixed a DTMF transmission failure issue.
- Fixed device syslog has no timestamp sometimes when using Audio Codes syslog viewer.
- Fixed sends RTP/AVP in the 200 OK over SRTP outbound calls.
- Fixed an issue that caused the call to get ended by the server after 30 minutes on hold.
- Fixed a bug that caused an Inbound SRTP call to fail with "488 Not Acceptable Here" due to an index value of 88 used by NetSapiens.
- Fixed a registration spamming issue.
- Fixed device does not show the Port extension number and values when downloading the MIB from SNMP.
- Fixed device in probability of fax failure occurs when using UCM and PSTN at T38.
- Fixed unit can't establish SRTP Session after re-invite.
- Fixed WebUI is getting slow after uploading custom Certificate Authority (CA).

NEW FEATURES OVERVIEW

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

Switch SIP Server When Keep-Alive Max Lost Is Reached

- **Web Configuration**

Users can find the configuration section in Web -> Profile -> Call Settings.



- **Functionality**

This feature allows users to configure Switch SIP Server When Keep-Alive Max Lost Is Reached. If set to "Yes", the SIP extension will switch SIP server immediately when max lost packets of SIP OPTIONS/NOTIFY keep-alive is reached.

Pvalue	Description	Value Range	Default
28907	Switch SIP Server When Keep-Alive Max Lost Is Reached	Number:	0 - No
28908		0 - No	
28909		1 - Yes	
28910			

Conference Notification Tone

- **Web Configuration**

Users can find the configuration section in Web -> Advanced Settings -> Ring Tones.

Conference Party Hangup Tone	f1=425@-15,c=600/600;
Conference Notification Tone	
Special Proceed Indication Tone	f1=350@-13, f2=440@-13, c=750/750-0/0;

- Functionality**

This feature allows users to configure the Conference Notification Tone.

Pvalue	Description	Value Range	Default
7077	Conference Notification Tone	String: MaxLength is 256 Characters	(Null)

Remote On Hold Tone

- Web Configuration**

Users can find the configuration section in Web -> Advanced Settings -> Ring Tones.

Special Condition Tone	f1=350@-13, f2=450@-13, c=750/750;
Remote On Hold Tone	

- Functionality**

This feature allows users to configure the Remote On Hold Tone

Pvalue	Description	Value Range	Default
28858	Remote On Hold Tone	String: MaxLength is 256 Characters	(Null)

Ringling Transfer

- Web Configuration**

Users can find the configuration section in Web -> Profile -> Call Settings.

Transfer on Conference Hangup	☒ No ☐ Yes
Ringling Transfer	☒ No ☐ Yes
Send Hook Flash Event	☒ No ☐ Yes

- Functionality**

This feature allows users to configure the Ringling Transfer. It defines whether the call is transferred to the other party when the transferring party hangs up while listening to the ringback tone.

Pvalue	Description	Value Range	Default
4820	Ringing Transfer	Number:	0 - No
4821		0 - No	
4822		1 - Yes	
4823			

RTP/RTCP Keep Alive On Hold

- Web Configuration**

Users can find the configuration section in Web -> Profile-> Call Settings.



The image shows a web configuration interface with three settings, each with a radio button for 'No' and 'Yes':

- RFC2543 Hold**: ☐ No ☒ Yes
- RTP/RTCP Keep Alive On Hold**: ☒ No ☐ Yes
- Disable Call Waiting**: ☒ No ☐ Yes

- Functionality**

This feature allows users to configure the RTP/RTCP Keep Alive On Hold. If yes, continue to send RTP/RTCP packets to keep alive when the call is on hold.

Pvalue	Description	Value Range	Default
28839	RTP/RTCP Keep Alive On Hold	Number:	0 – No
28840		0 – No	
28841		1 – Yes	
28842			

OpenVPN Username/Password

- Web Configuration**

User can find the configuration section in Web -> Maintenance-> VPN.



The image shows a web configuration interface for OpenVPN with the following fields and buttons:

- OpenVPN Digest**: A dropdown menu currently set to "SHA1 Default".
- OpenVPN Username**: A text input field.
- OpenVPN Password**: A text input field.
- OpenVPN CA**: A label above two buttons: "Upload" and "Delete".

- Functionality**

Configures OpenVPN authentication username and password.

Pvalue	Description	Value Range	Default
8394	OpenVPN Username	String: Maxlength is 32 Characters	(Null)
8395	OpenVPN Password	String: Maxlength is 32 Characters	(Null)

Static DNS

- Web Configuration**

Users can find the configuration in Web UI -> Advanced Settings -> Static DNS.

Static DNS

A Record Settings

No	Name	TTL	Address
1		300	
2		300	
3		300	
4		300	
5		300	
6		300	
7		300	
8		300	
9		300	
10		300	
11		300	
12		300	
13		300	
14		300	
15		300	
16		300	
17		300	
18		300	

SRV Settings

No	Name	TTL	Priority	Weight	Port	Target
1		300	0	0	0	
2		300	0	0	0	
3		300	0	0	0	
4		300	0	0	0	
5		300	0	0	0	
6		300	0	0	0	
7		300	0	0	0	
8		300	0	0	0	
9		300	0	0	0	
10		300	0	0	0	
11		300	0	0	0	
12		300	0	0	0	
13		300	0	0	0	
14		300	0	0	0	
15		300	0	0	0	
16		300	0	0	0	
17		300	0	0	0	
18		300	0	0	0	

NAPTR Settings

No	Name	TTL	Order	Preference	Flags	Service	Regexp	Replacement
1		300	0	0		SIP+D2U		
2		300	0	0		SIP+D2U		
3		300	0	0		SIP+D2U		
4		300	0	0		SIP+D2U		
5		300	0	0		SIP+D2U		
6		300	0	0		SIP+D2U		
7		300	0	0		SIP+D2U		
8		300	0	0		SIP+D2U		
9		300	0	0		SIP+D2U		
10		300	0	0		SIP+D2U		
11		300	0	0		SIP+D2U		
12		300	0	0		SIP+D2U		
13		300	0	0		SIP+D2U		
14		300	0	0		SIP+D2U		
15		300	0	0		SIP+D2U		
16		300	0	0		SIP+D2U		
17		300	0	0		SIP+D2U		
18		300	0	0		SIP+D2U		

- **Functionality**

This feature could let the user configure the Order Name, TTL, Order, Preference, Flags, Service, Regexp, Replacement, Priority, Weight, Target, Port, Target, and IP Address for different DNS modes in A Record, NAPTR, SRV, and Settings.

New P Values
A Record Settings

Pvalue	Description	Value range	Default
93014	Name	String:	(Null)
93034		Max length is 512	
93054		Characters	
93074			
93094			
93114			
93134			
93154			
93174			
93194			
93214			

93234			
93254			
93274			
93294			
93314			
93334			
93354			
93015	TTL	Number:	300
93035		300 to 65535	
93055			
93075			
93095			
93115			
93135			
93155			
93175			
93195			
93215			
93235			
93255			
93275			
93295			
93315			
93335			
93355			
93016	Address	String:	(Null)
93036			
93056			
93076			
93096			
93116			
93136			
93156			
93176			
93196			
93216			
93236			
93256			
93276			
93296			
93316			

93336			
93356			

SRV Settings

Pvalue	Description	Value range	Default
93008	Name	String: Max length is 512 characters	(Null)
93028			
93048			
93068			
93088			
93108			
93128			
93148			
93168			
93188			
93208			
93228			
93248			
93268			
93288			
93308			
93328			
93348			
93009	TTL	Number: 300 to 65535	300
93029			
93049			
93069			
93089			
93109			
93129			
93149			
93169			
93189			
93209			
93229			
93249			
93269			
93289			
93309			
93329			

93349			
93010 93030 93050 93070 93090 93110 93130 93150 93170 93190 93210 93230 93250 93270 93290 93310 93330 93350	Priority	Number: 0 to 65535	0
93011 93031 93051 93071 93091 93111 93131 93151 93171 93191 93211 93231 93251 93271 93291 93311 93331 93351	Weight	Number: 0 to 65535	0
93012 93032 93052	Port	Number: 0 to 65535	0

93072			
93092			
93112			
93132			
93152			
93172			
93192			
93212			
93232			
93252			
93272			
93292			
93312			
93332			
93352			
93013	Target	String:	(Null)
93033			
93053			
93073			
93093			
93113			
93133			
93153			
93173			
93193			
93213			
93233			
93253			
93273			
93293			
93313			
93333			
93353			

NAPTR Settings

Pvalue	Description	Value range	Default
93000	Name	String:	(Null)
93020		Max length is 512	
93040		characters	
93060			

93080			
93100			
93120			
93140			
93160			
93180			
93200			
93220			
93240			
93260			
93280			
93300			
93320			
93340			
93001	TTL	Number:	300
93021		300 to 65535	
93041			
93061			
93081			
93101			
93121			
93141			
93161			
93181			
93201			
93221			
93241			
93261			
93281			
93301			
93321			
93341			
93002	Order	Number:	0
93022		0 to 65535	
93042			
93062			
93082			
93102			
93122			
93142			
93162			

93182			
93202			
93222			
93242			
93262			
93282			
93302			
93322			
93342			
93003	Preference	Number:	0
93023		0 to 65535	
93043			
93063			
93083			
93103			
93123			
93143			
93163			
93183			
93203			
93223			
93243			
93263			
93283			
93303			
93323			
93343			
93004	Flags	String:	(Null)
93024			
93044			
93064			
93084			
93104			
93124			
93144			
93164			
93184			
93204			
93224			
93244			
93264			

93284			
93304			
93324			
93344			
93005	Service	String:	SIP+D2U
93025		Max length is 512	
93045		characters	
93065			
93085			
93105			
93125			
93145			
93165			
93185			
93205			
93225			
93245			
93265			
93285			
93305			
93325			
93345			
93006	Regex	String:	(Null)
93026			
93046			
93066			
93086			
93106			
93126			
93146			
93166			
93186			
93206			
93226			
93246			
93266			
93286			
93306			
93326			
93346			

93007	Replacement	String:	(Null)
93027			
93047			
93067			
93087			
93107			
93127			
93147			
93167			
93187			
93207			
93227			
93247			
93267			
93287			
93307			
93327			
93347			

Strict Password Rules

- Web Configuration**

Users can find the configuration section in Web -> Maintenance->Web/SSH Access.

Strict Password Rules

Enable strict password rules ☐ No ☒ Yes

Minimum password length

Required character classes

Allowed character classes

Access Control Lists

- Functionality**

This feature allows users to enable or disable the strict password rules, set the minimum password length, set the required number of character classes, and select the allowed character classes.

Pvalue	Description	Value Range	Default
28788	Enable strict password rules	0 – No 1 – Yes	0 – No
28790	Minimum password length	Number: 4 - 30	8

28791	Required number of character classes	Number: 0 - 3	3
28792	Allowed Character classes	Number: 7 – Lower case, upper case, numbers, 3 – Lower case, upper case, 5 – Lower case, numbers 6 – Upper case, numbers 11 – Lower case, upper case, special characters 13 – Lower case, numbers, special characters 14 – Upper case, numbers, special characters 9 – Lower case, special characters 10 – Upper case, special characters 12 – Numbers, special characters 1 – Lower case 2 – Upper case 4 – Numbers 8 – Special characters 15 - Lower case, upper case, numbers, special characters	7

Secondary NTP server

User can find the configuration section in Web -> Maintenance-> Date and Time.

NTP Server	pool.ntp.org
Secondary NTP Server	
NTP Update Interval	60

- Functionality**

This feature allows users to configure the Secondary NTP Server. It defines the URL or IP address of the NTP server. The gateway may obtain the date and time from the server.

Pvalue	Description	Value Range	Default
8333	Secondary NTP Server	String: Server address	(Null)

Local Time

User can find the configuration section in Web -> Maintenance-> Date and Time.

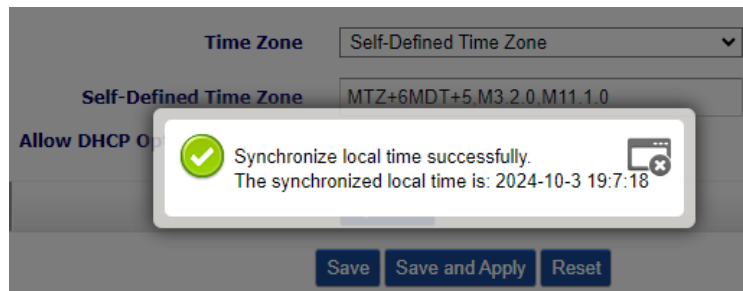
Self-Defined Time Zone

Allow DHCP Option 2 to override time zone ☐ No ☒ Yes

Local Time

- **Functionality**

This feature allows users to set device time from the host PC time via the browser. After clicking the bottom “Sync PC”, the device will pop up a window that will notice it synchronizes the local time.



Pvalue	Description	Value Range	Default
	Local Time	Button	(Null)

T.38 Max Bit Rate

- **Web Configuration**

User can find the configuration section in Web -> Profile-> Fax Settings.

Enable Silence Detection for Fax Disconnect ☐ No ☒ Yes

T.38 Max Bit Rate

- **Functionality**

This feature allows users to select the maximum T. 38 bit rate. Lowering the maximum fax bit rate may help improve the fax success rate. Only effective when the fax machine is a fax receiver.

Pvalue	Description	Value Range	Default
28913	T.38 Max Bit Rate	Number:	2 - 9600bps
28914		1 - 4800bps	
28915		2 - 9600bps	
28916		3 - 14400bps	

FIRMWARE VERSION 1.0.25.2

PRODUCT NAME

GXW4216 V2, GXW4224 V2, GXW4232 V2, GXW4248 V2

DATE

05/23/2024

FIRMWARE FILE INFORMATION

- GXW4216 V2 firmware file name: gxw4216v2fw.bin
MD5: cd93ffcd8047010f26502ac5cd80c1ec
- GXW4224 V2 firmware file name: gxw4224v2fw.bin
MD5: 9d43e89edf4099cfd0a9d7ce8e50dcd8
- GXW4232 V2 firmware file name: gxw4232v2fw.bin
MD5: 934109f2261cbe2518f71f1af9972044
- GXW4248 V2 firmware file name: gxw4248v2fw.bin
MD5: 0dd2b4994c174df158aae106e4fd8de8

ENHANCEMENT

- Add IVR support to check the device's individual certificate information.
- Add support of variable \$PN and \$MAC in Config Server Path.

BUG FIX

- Fixed unit can't establish SRTP Session after re-invite.
- Fixed a bug that caused the GXW device not to request the config file until a reboot.
- Fixed device continues to send the same credentials after the server responds with a 403 Forbidden.
- Fixed web UI wording change request for DNS SRV failover.
- Fixed device could use weak ciphers/key exchange for SSH.

FIRMWARE VERSION 1.0.25.1

PRODUCT NAME

GXW4216 V2, GXW4224 V2, GXW4232 V2, GXW4248 V2

DATE

04/26/2024

FIRMWARE FILE INFORMATION

- GXW4216 V2 firmware file name: gxw4216v2fw.bin
MD5: b7b8efa6c9770cd1024649a8a4388e1a
- GXW4224 V2 firmware file name: gxw4224v2fw.bin
MD5: 275311195954abf9d91221b67d96f393
- GXW4232 V2 firmware file name: gxw4232v2fw.bin
MD5: bebc5b66fa18c10eac262037f3d11001
- GXW4248 V2 firmware file name: gxw4248v2fw.bin
MD5: eae705ecc47ee06a2410931740feff74

ENHANCEMENT

- Set the “Disable User Level Web Access” (P28158) to “Yes” by default.
- Set the “Disable Viewer Level Web Access” (P28159) to “Yes” by default.
- Force user to change the password upon first login using the default password to the Admin/User/Viewer Account.

BUG FIX

- Fixed an issue in the “Prompt Dial Tone Code” feature.

FIRMWARE VERSION 1.0.23.2

PRODUCT NAME

GXW4216 V2, GXW4224 V2, GXW4232 V2, GXW4248 V2

DATE

04/16/2024

FIRMWARE FILE INFORMATION

- GXW4216 V2 firmware file name: gxw4216v2fw.bin
MD5: 76ec50493c456d4b723542bcb6182e4c
- GXW4224 V2 firmware file name: gxw4224v2fw.bin
MD5: 9d3ff361ebc9d5ba9e59979ce8c739d8
- GXW4232 V2 firmware file name: gxw4232v2fw.bin
MD5: d54fbfd375495be0a7291eb1563a2c96
- GXW4248 V2 firmware file name: gxw4248v2fw.bin
MD5: 5b481ef418f0ee94ef667c5679191246

ENHANCEMENT

- Added Support for "Keep Security Setting After Reset". [Keep Security Setting After Reset]

BUG FIX

- Fixed a bug that caused SRTP to decrypt RTP fail causing one-way audio after a 20+ minute call.
- Fixed an issue in no audio on 200ok/ack with UAS on outbound calls.
- Fixed a bug that caused the device cannot connect to the OpenVPN server.
- Fixed unit can't establish SRTP Session after re-invite.
- Fixed the users' report of heavy static noise in the FXS TX audio.
- Fixed the inaccurate encoding and decoding of DTMF durations with SIP Info.
- Fixed the remote party perceived echo issue.
- Fixed a bug that caused DDNS does not work.
- Fixed unit stops responding after a couple of hours.
- Fixed an echo issue on the answering machine.

NEW FEATURES OVERVIEW

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

Keep Security Setting After Reset

User can find the configuration section in Web -> Maintenance-> Security Settings-> Security

Validate Server Certificates ☒ No ☐ Yes
 Keep Security Setting After Reset ☒ No ☐ Yes
 Disable Weak TLS Cipher Suites

- **Functionality**

This feature depends on the reset lock feature. If enabled, security-related settings and trusted CA-related settings will be kept during different kinds of resetting.

Pvalue	Description	Value Range	Default
28849	Keep Security Setting After Reset	Number: 0 - No 1 - Yes	0 - No

FIRMWARE VERSION 1.0.21.2

PRODUCT NAME

GXW4216 V2, GXW4224 V2, GXW4232 V2, GXW4248 V2

DATE

12/11/2023

FIRMWARE FILE INFORMATION

- GXW4216 V2 firmware file name: gxw4216v2fw.bin
MD5: e85341789a1b6e63a9ec14ec1e3ab699
- GXW4224 V2 firmware file name: gxw4224v2fw.bin
MD5: 33bb149f0865b53d2df5f48f6c4c385f
- GXW4232 V2 firmware file name: gxw4232v2fw.bin
MD5: a1b2fd836c3920cbe428684c9a9a8ce6
- GXW4248 V2 firmware file name: gxw4248v2fw.bin
MD5: 24a04dcc6af08a0ae1e8acbf560f0ce0

ENHANCEMENT

- Added a “Provision” button which lets user provision manually via WebUI (Maintenance->Upgrade and Provisioning).
- Changed the order of download config file requests to cfgMAC.xml, cfgMAC, cfgMODEL.xml, and cfg.xml.

BUG FIX

- Fixed a bug that caused DDNS not to work.
- Fixed a bug that caused the unit to stop responding after a couple of hours.
- Fixed an Issue with the registration.
- Fixed inaccurate encoding and decoding of DTMF durations.
- Fixed inaccurate encoding and decoding of DTMF durations with SIP Info.
- Fixed an issue to lock/unlock extensions from analog phones using local feature code.

FIRMWARE VERSION 1.0.19.1

PRODUCT NAME

GXW4216 V2, GXW4224 V2, GXW4232 V2, GXW4248 V2

DATE

10/18/2023

FIRMWARE FILE INFORMATION

- GXW4216 V2 firmware file name: gxw4216v2fw.bin
MD5: df90c238f735b911e0f5ed6663b9463d
- GXW4224 V2 firmware file name: gxw4224v2fw.bin
MD5: 2ff527d407393e2bee4bfe84bea248c9
- GXW4232 V2 firmware file name: gxw4232v2fw.bin
MD5: b690d7e42bd2590d3951b367bd5b4a48
- GXW4248 V2 firmware file name: gxw4248v2fw.bin
MD5: 6faa1612321d88bd8415b21fe8ad141c

ENHANCEMENT

- Added new value "4 - Auto" in NAT Traversal(P52/730/630/614).
- Added support AVS DTMF Detector Parameter. [AVS DTMF Detector Parameters]
- Add the ability to force local ringback tone with 180 ringing SDP. [Use P-Early-Media Header]
[Ringback Tone at No Early Media]
- Added support Radius auth protocol. [RADIUS Auth Protocol]
- Add ability to lock/unlock extension from analog phones using local feature code.[Lock/Unlock
Extension Code]

BUG FIX

- Fixed NAT Traversal does not have the "Auto" option.
- Fixed device the ringing frequency is "C=100/100;", unable to answer.
- Fixed device sends registration information all the time.
- Fixed device produces core dump file when config Internet Protocol to "Both, prefer IPv6".
- Fixed FXS18 off hook failed after long time performance.
- Fixed the Call Waiting CID cannot be displayed.
- Fixed an echo issue during the call.
- Fixed wrong time when using DHCP option 2 for Timezone.
- Fixed device does not process DTMF on early media stage.
- Fixed the admin/Viewer/user password containing 'spaces' can be saved but not effective.
- Fixed using G723 to make phone calls and generate core files.
- Fixed unable to show caller ID when the number begins with "#".

- Fixed device didn't play DTMF tone when auxiliary equipment only supports in audio.
- Fixed AVS misreporting DTMF information during FXS calls.
- Fixed the Inaccurate encoding and decoding of DTMF durations with SIP Info.
- Fixed the DTMF tones cause device to not send audio.
- Fixed the poor echo processing during a call.
- Fixed device sends a fax to the auxiliary, and the response to be tested is 500.
- Fixed when the device starts requesting files, the LCD keeps flashing after turning off the server, and the page cannot be restarted.
- Fixed inaccurate encoding and decoding of DTMF durations.
- Fixed Gateway does not use NTP server from DHCP option 42.
- Fixed provisioning will reset some parameters.

NEW FEATURES OVERVIEW

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

AVS DTMF Detector Parameters

User can find the configuration section in Web -> Profile-> Audio Settings.

DSP DTMF Detector Min Level	-25 dBm
DSP DTMF Detector SNR	1
DSP DTMF Detector Deviation	25 %
DSP DTMF Detector Twist	5 dB

- **Functionality**

This feature allows users to configure the AVS DTMF detector related parameters. DSP DTMF Detector Min Level sets the minimum level required for DTMF tone to be considered valid, DSP DTMF Detector SNR sets the Maximum signal-to-noise ratio required for DTMF tone to be considered valid, DSP DTMF Detector Deviation sets the deviation, above and below the central frequency, DSP DTMF Detector Twist sets the maximum value by which one frequency energy level can surpass another frequency energy level.

Pvalue	Description	Value Range	Default
28804 28805 28806 28807	DSP DTMF Detector Min Level	Number: -45 – 0	-25
28808 28809 28810 28811	DSP DTMF Detector SNR	Number: 0 – 2	1

28812	DSP DTMF Detector Deviation	Number: 0 – 25	25
28813			
28814			
28815			
28816	DSP DTMF Detector Twist	Number: 0 – 12	5
28817			
28818			
28819			

Use P-Early-Media Header

User can find the configuration section in Web -> Profile-> SIP Settings-> Basic Settings.

Use P-Asserted-Identity Header ☒ No ☐ Yes
 Use P-Early-Media Header ☒ No ☐ Yes
 SIP REGISTER Contact Header Uses ☒ LAN Address ☐ WAN Address

• Functionality

This feature allows users to configure the Use P-Early-Media Header. It controls whether the P-Early-Media Header support is enabled.

Pvalue	Description	Value Range	Default
60072	Use P-Early-Media Header	Number: 0 – No 1 – Yes	0 – No
60172			
60272			
60372			

Ringback Tone at No Early Media

User can find the configuration section in Web -> Profile-> Call Settings.

Callee Flash to 3WC ☒ No ☐ Yes
 Ring Timeout
 Ringback Tone at No Early Media ☒ No ☐ Yes
 Delayed Call Forward Wait Time

• Functionality

This feature allows users to configure the Ringback Tone at No Early Media. If yes, play ringback tone

when there is no receiving early media RTP packets.

Pvalue	Description	Value Range	Default
60073	Ringback Tone at No Early	Number:	0 – No
60173	Media	0 – No	
60273		1 – Yes	
60373			

RADIUS Auth Protocol

User can find the configuration section in Web -> Maintenance-> RADIUS.

Action upon RADIUS Auth Server Error ☐ Reject Access ☒ Authenticate Locally

RADIUS Auth Protocol PAP

RADIUS Auth Server Address

RADIUS Auth Server Port

Protocol Options:
 PAP
 CHAP
 MsCHAPv1
 MsCHAPv2

- Functionality**

This feature allows users to configure RADIUS authentication protocol.

Pvalue	Description	Value Range	Default
28803	RADIUS Auth Protocol	Number: 0 – PAP 1 – CHAP 2 – MsCHAPv1 3 – MsCHAPv2	0 – PAP

User can find the configuration section in Web -> Advanced Settings-> System Features.

Prompt Dial Tone Code

Port Lock Code

Play Busy Tone When Account is unregistered ☒ No ☐ Yes

- Functionality**

This feature allows users to configure with star code to unlock port 1- 48 with the dial out code. The default is *21. The user is required to press *21 and the four-digit locking code twice to set the lock code. To make a call, the user requires to press *21 and then the locking code and then the actual number to dial out. If there is no locking code, the user dials out the actual number to make a call.

Pvalue	Description	Value Range	Default
24848	Port Lock Code	String: Digital Min Length 0 character Max Length 2 characters	21

Lock/Unlock Extension Code

User can find the configuration section in Web -> FXS Ports-> Advanced Port Settings.

Advanced Port Settings

Port	Offhook Auto-dial	Hunting Group	Request URI Routing ID	Lock/Unlock extension code
FXS 1		None ▼		
FXS 2		None ▼		
FXS 3		None ▼		
FXS 4		None ▼		
FXS 5		None ▼		
FXS 6		None ▼		
FXS 7		None ▼		
FXS 8		None ▼		
FXS 9		None ▼		
FXS 10		None ▼		
FXS 11		None ▼		
FXS 12		None ▼		
FXS 13		None ▼		
FXS 14		None ▼		
FXS 15		None ▼		
FXS 16		None ▼		

- Functionality**

This feature allows users to configure the locking extension for ports 1 to 48.

Pvalue	Description	Value Range	Default
24800 ~ 24847	Lock/Unlock extension code	String: Digital Min Length 4 characters Max Length 4 characters	(Null)

FIRMWARE VERSION 1.0.17.1

PRODUCT NAME

GXW4216 V2, GXW4224 V2, GXW4232 V2, GXW4248 V2

DATE

09/05/2023

FIRMWARE FILE INFORMATION

- GXW4216 V2 firmware file name: gxw4216v2fw.bin
MD5: 9c6ab45d776052c0a746d621c4b4358a
- GXW4224 V2 firmware file name: gxw4224v2fw.bin
MD5: c172564346c5c13d445a93499f58f66c
- GXW4232 V2 firmware file name: gxw4232v2fw.bin
MD5: d947f0f6a95d8eb15b757cb175ff05af
- GXW4248 V2 firmware file name: gxw4248v2fw.bin
MD5: 5bcf5304c510c0ffa10f530d0df34ef6

ENHANCEMENT

- Updated the “Replace Beginning '+' in Caller ID with” support a predefined string. (Pvalue changed from P29073/29173/29273/29373 to P60083/60183/60283/60383). [Replace the beginning '+' in Caller ID with]
- Added the new option “3 - PR” in “Visual MWI type(P4371/4372/4373/4374)” which sends MWI signaling using Polarity Reversal.
- Added support the “ = ” sign in config and firmware server path.
- Updated “Prefer Primary SIP Server(P4567/4568/4569/4570)” options “1 – Yes” to “1 - Will register to primary server if failover server registration expires, and 2 - Will register to primary server if primary server responds”.

BUG FIX

- Fixed device didn't support TLS1.
- Fixed device unable to import mib file to PRTG.
- Fixed the inaccurate encoding and decoding of DTMF durations with SIP Info.
- Fixed device unit sends cancel to sip server during IP call.
- Fixed MWI with NEON does not work when using ETSI-DTMF.
- Fixed SIP Server cannot contain hyphens.
- Fixed gateway fails to authenticate web access using the Radius server.
- Fixed system prompt "incorrect password" despite keying the correct PIN code for outbound calls.
- Fixed login to the web using GXW4248V2, some functions in French and Spanish are not translated.

NEW FEATURES OVERVIEW

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

Replace the beginning '+' in Caller ID with

User can find the configuration section in Web -> Profile-> Call Settings.

Anonymous Call Rejection ☒ No ☐ Yes

Replace Beginning '+' in Caller ID with

Hunting Group Type ☒ Circular ☐ Linear

- Functionality**

This feature allows users to configure the Replace the beginning '+' in Caller ID with the configured string when sending the Caller ID to the analog phone.

Pvalue	Description	Value Range	Default
60083	Replace the beginning '+' in Caller ID with	String: number 0 - 9 Max length is 6 characters.	(Null)
60183			
60283			
60383			

FIRMWARE VERSION 1.0.15.2

PRODUCT NAME

GXW4216 V2, GXW4224 V2, GXW4232 V2, GXW4248 V2

DATE

05/05/2023

FIRMWARE FILE INFORMATION

- GXW4216 V2 firmware file name: gxw4216v2fw.bin
MD5: 09c9f1e50fb415992255021bdc3cf500
- GXW4224 V2 firmware file name: gxw4224v2fw.bin
MD5: f14a8effc22f22d1318d0d64c2b01ff6
- GXW4232 V2 firmware file name: gxw4232v2fw.bin
MD5: b70779dd73ea79c333f65df8c52dc8b2
- GXW4248 V2 firmware file name: gxw4248v2fw.bin
MD5: b2aee974a3ccc9010b734cae1da37ebb

ENHANCEMENT

- Add the Ability to specify DTMF timing for InBand [Custom DTMF InBand Duration]

BUG FIX

- Fixed the device using a random sip port requires a reboot to take effect.
- Fixed No Audio on incoming transferred calls in external calls.
- Fixed device unit sends BYE with the wrong CSeq.
- Fixed Special Proceed Indication Tone is overridden by Special Condition Tone with GIBTELECOM ITSP.
- Fixed after closing SIP registration, re-open SIP registration, and the device sends two registration requests.
- Fixed device uploads too large error format configuration file without a prompt on the web.
- Fixed the Authenticate server certificate domain/chain option needs to be restarted to take effect.
- Fixed the wrong time when using DHCP option 2 for the time zone.

NEW FEATURES OVERVIEW

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

Custom DTMF InBand Duration

User can find the configuration section in Web -> Profile-> Audio Settings.

DTMF Payload Type

Custom DTMF InBand Duration

Duration: ms, Inter Duration: ms

- Functionality**

This feature allows users to configure the Custom DTMF InBand Duration. If "Duration" is 0, the gateway will totally pass-through transfer the InBand DTMF from the analog agent side; If "Duration" is not 0, we can use this feature to customize the duration and inter-duration of InBand DTMF; The valid range of "Duration" is 0 or 40~2000ms, the valid range of "Inter-Duration" is 40~2000ms.

Pvalue	Description	Value Range	Default
28134	Custom DTMF InBand Duration: Duration	Number: 0 or 40~2000 (ms)	0
28135			
28136			
28137			
28138	Custom DTMF InBand Duration: Inter Duration	Number: 0 or 40~2000 (ms)	50
28139			
28140			
28141			

FIRMWARE VERSION 1.0.13.2

PRODUCT NAME

GXW4216 V2, GXW4224 V2, GXW4232 V2, GXW4248 V2

DATE

03/10/2023

FIRMWARE FILE INFORMATION

- GXW4216 V2 firmware file name: gxw4216v2fw.bin
MD5: 9dc017b2c45f10851c620e4a831722ea
- GXW4224 V2 firmware file name: gxw4224v2fw.bin
MD5: eca6b6bdab56e9eb8a6dae86c0265d58
- GXW4232 V2 firmware file name: gxw4232v2fw.bin
MD5: e48304a7dc3a998fd1e8fd0de81a9a2e
- GXW4248 V2 firmware file name: gxw4248v2fw.bin
MD5: b8525f3f7b6a0d8a586c8de32f96b1b2

ENHANCEMENT

- Added support for the MWI Tone. [MWI Tone]
- Added support for the Special Proceed Indication Tone. [Special Proceed Indication Tone].
- Added support for the Special Condition Tone. [Special Condition Tone]
- Add the ability to ignore the alert-info header. [Ignore Alert-Info Header]
- Added support for "Extra Debug" in Syslog Level.
- Update the status page to show the HW version with the model's name.
- Added the ability to configure special features with GIBTELECOM via TR069.

BUG FIX

- Fixed the device cannot log in to the web if the password length exceeds 18 characters.
- Fixed after closing SIP registration, re-open SIP registration, and the device sends two registration requests.
- Fixed the Inbound long-duration call fails under certain configurations.
- Fixed Config Server Path does not support the "+" character.
- Fixed an off-hook delay problem that occurs when the FAX runs for a long period.
- Fixed device the off hook not detected during ringing.
- Fixed device with no dial tone when pressing Flash+4 to make a transfer.
- Fixed when the failover SIP server address is domain name plus port registration, and the sending destination port is wrong.
- Fixed device unit does not allow/send DTMF A B C D digits.
- Fixed an issue that no audio for the second call received.

- Fixed a bug in which Syslog is enabled on the HT device in the local deployment, and the content of the syslog package is empty.
- Fixed the authenticate server certificate domain/chain option needs to be restarted to take effect.
- Fixed an issue that causes DTMF data sent in disorder.
- Fixed Registration with a random port after a reboot.
- Fixed the product model display error on the status page in other languages except in English.

NEW FEATURES OVERVIEW

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

MWI Tone

User can find the configuration section in Web -> Profile-> Call Settings.

Visual MWI Type ☒ FSK ☐ NEON

MWI Tone ☒ Default ☐ Special Proceed Indication Tone

Transfer on Conference Hangup ☒ No ☐ Yes

• Functionality

This feature allows users to configure the MWI tone for the voice mail, the device will play the MWI tone when the user picks up. The default is the Stuttgart dial tone.

Pvalue	Description	Value Range	Default
28197	MWI Tone	0 – Default	0 – Default
28198		1 – Special Proceed	
28199		Indication Tone	
28200			

Special Proceed Indication Tone

• Web Configuration

User can find the configuration section in Web -> Advanced Settings-> Ring Tones.

Conference Party Hangup Tone

Special Proceed Indication Tone

Special Condition Tone

• Functionality

This feature allows users to configure the special process indicator tone for the voice mail, the device will play the MWI tone when the user picks up. The default is the Stuttgart dial tone.

Pvalue	Description	Value Range	Default
28196	Special Proceed Indication Tone	String Max Length: 256	f1=350@-13, f2=440@-13, c=750/750-0/0;

Special Condition Tone

- Web Configuration**

User can find the configuration section in Web -> Advanced Settings-> Ring Tones.

Special Proceed Indication Tone

Special Condition Tone

- Functionality**

This feature allows users to configure the special condition tone. When a user is activated using the GIBTELECOM in the Special Feature. the SIP server sends a NOTIFY with "special-condition-tone". The "Special Condition Tone" will be played instead of the "Dial Tone".

Pvalue	Description	Value Range	Default
28211	Special Proceed Indication Tone	String Max Length: 256	f1=350@-13, f2=450@-13, c=750/750;

Ignore Alert-Info Header

User can find the configuration section in Web -> Profile-> SIP Settings-> Basic Settings

Contact with TCP/ TLS

Allow SIP Factory Reset ☒ No ☐ Yes

Ignore Alert-Info Header ☒ No ☐ Yes

SIP User-Agent

- Functionality**

This feature allows users to configure Ignore Alert-Info Header. It is configured to play the default ringtone by ignoring the Alert-Info header.

Pvalue	Description	Value Range	Default
26018	Ignore Alert-Info Header	0 – No	0 – No
26118		1 – Yes	
26218			
26318			

FIRMWARE VERSION 1.0.11.2

PRODUCT NAME

GXW4216 V2, GXW4224 V2, GXW4232 V2, GXW4248 V2

DATE

01/10/2023

FIRMWARE FILE INFORMATION

- GXW4216 V2 firmware file name: gxw4216v2fw.bin
MD5: 25b13af159971fa80864cb2a810fa8e5
- GXW4224 V2 firmware file name: gxw4224v2fw.bin
MD5: 031ff3bde2f9b475a8a0440bb8f01c50
- GXW4232 V2 firmware file name: gxw4232v2fw.bin
MD5: 937387890687f4bf8d1711caef73a0d7
- GXW4248 V2 firmware file name: gxw4248v2fw.bin
MD5: 55a63fbf82b950774e1da645e53ecea

ENHANCEMENT

- Added support for Download and Process All Available Config Files. [Download and Process All Available Config Files].
- Added the new voice prompt *98.
- Added the additional Flash digit events in the Special Feature Gibtelecom.
- Added support for new override config file option in "cfgMAC_override.xml".
- Added Pvalue not on WebUI:
P8615 - Disable filename in URL for config provision. (1 -Yes, 0 – No. Default is 0)
P8616 - Disable filename in URL for firmware upgrade. (1 -Yes, 0 – No. Default is 0)

BUG FIX

- Fixed the device responds with not found while configured with a non-profile1 account
- Fixed an issue that made account status under profile4 displayed incorrectly.
- Fixed device will display Registered abnormal after changing the profile ID via GDMS.
- Fixed the sip server address and port settings that do not conform to the rules can be saved.
- Fixed the Call waiting dropped by MTAS Server.
- Fixed Local RBT is not played after 180 ringing.
- Fixed the call that cannot be held the current one is valid_close SRTP_*19.
- Fixed the WebUI description error due to the Increase Password length for GXW42xx V2
- Fixed an issue that caused the FXS port test failure.
- Fixed the software stops when using the "Replace Beginning '+' with 00 in Caller ID" feature.
- Fixed DTMF Negotiation Fails Upon Transfer.

- Fixed the device cannot be started and core files are generated after several months of standby.
- Fixed Call quality data not reported after the factory reset.
- Fixed Modifying sip accounts on the web page does not report user modification.
- Fixed a bug that the device only read the first ten FXS ports' DND status.

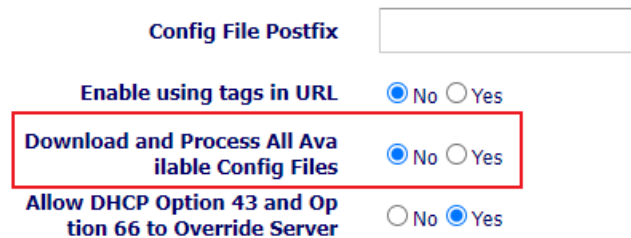
NEW FEATURES OVERVIEW

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

Download and Process All Available Config Files

- **Web Configuration**

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



Config File Postfix

Enable using tags in URL ☒ No ☐ Yes

Download and Process All Available Config Files ☒ No ☐ Yes

Allow DHCP Option 43 and Option 66 to Override Server ☐ No ☒ Yes

- **Functionality**

This feature allows users to inverse download all config files. If set to Yes, the device will download and apply (overwrite) all available configs in the order of cfg.xml, cfgProductModel.xml, cfgMAC.xml, cfgMAC, cfgMAC_override.xml, and "DHCP option 67 bootfile".

Pvalue	Description	Value range	Default
8467	Download and Process ALL Available Config Files	0 – No 1 - Yes	0 – No

FIRMWARE VERSION 1.0.9.1

PRODUCT NAME

GXW4216 V2, GXW4224 V2, GXW4232 V2, GXW4248 V2

DATE

11/04/2022

FIRMWARE FILE INFORMATION

- GXW4216 V2 firmware file name: gxw4216v2fw.bin
MD5: aa17d02a9ec1057f87dad431e6236dfc
- GXW4224 V2 firmware file name: gxw4224v2fw.bin
MD5: 497ce530a95abb5af9bcfdc96e0ca351
- GXW4232 V2 firmware file name: gxw4232v2fw.bin
MD5: 9eb3321e7c99f1d7c138a22e771b59e2
- GXW4248 V2 firmware file name: gxw4248v2fw.bin
MD5: ca2c2645283a067299043b92fb7f8bf6

ENHANCEMENT

- Increased the Admin, User, and Viewer Password length to 30.

BUG FIX

- Fixed devices send wrong call status reports as P2P after the local three-party conference ends.
- Fixed sips TLS registration failed after filling in the Custom Certificate with the GEN 1 certificate.
- Fixed a bug that caused units to lose registration randomly.
- Fixed a ringing multiple ports behavior issue.
- Fixed devices Cannot enable the local call feature using a certain dial plan.
- Fixed the forced SRTP (*18) function is not effective when it is currently effective.
- Fixed a ringing multiple ports behavior issue.
- Fixed an issue that causes the content of the sip log file to be incomplete.
- Fixed the ACS URL does not clear up empty after reset.

FIRMWARE VERSION 1.0.7.2

PRODUCT NAME

GXW4216 V2, GXW4224 V2, GXW4232 V2, GXW4248 V2

DATE

10/11/2022

FIRMWARE FILE INFORMATION

- GXW4216 V2 firmware file name: gxw4216v2fw.bin
MD5: 8fbf066a6e0a4a6beb7b3742eab21830
- GXW4224 V2 firmware file name: gxw4224v2fw.bin
MD5: f603948cc2161bc139551edda284b583
- GXW4232 V2 firmware file name: gxw4232v2fw.bin
MD5: c53c9c3e17aed2c4fe982191c6028a0d
- GXW4248 V2 firmware file name: gxw4248v2fw.bin
MD5: bb97654874cb33598671a93f27ec9dcb

ENHANCEMENT

- Added support to Define the Preferred Provisioning Method. [Configuration File Types Allowed]
- Added support of DHCP Option 150. [Additional Override DHCP Option]
- Added support for SRTP Key Length. [SRTP Key Length]
- Added support for SSL Key Log File. [With Secret Key Information]
- Added support for Security Controls for SSH Access. [Security Controls for SSH Access]
- Added support for Enable using tags in URL. [Enable using tags in URL]
- Updated Syslog to make user reading more friendly.

BUG FIX

- Fixed the device's no audio and randomly reboot issues after the upgrade.
- Fixed a ringing multiple ports behavior issue.
- Fixed devices Cannot enable the local call feature using a certain dial plan.
- Fixed a device upgrade failed issue due to out of memory.
- Fixed a fax transmission issue between GXW42xx devices.
- Fixed device ACS URL not set to "https://acs.gdms.cloud" by default.
- Fixed a bug that caused the call is abnormal after the participant transfers the call.
- Fixed device some vulnerabilities appear while scanning.
- Fixed device the status light is abnormal after the FTP upgrade fails.
- Fixed a wrong error prompt in uploading the configuration file.
- Fixed a bug that causes the device will turn off the LCD screen Led after 5 minutes.
- Fixed Uptime on French mode display abnormal on Web UI.

- Fixed a bug that causes fax T.38 always to fail with SPA112.
- Fixed device always sends DTMF event # after using # as the dial key.
- Fixed the MAC on the device info page is not fully displayed.
- Fixed VLAN name and management address identification is missing in the reporting information at startup.

NEW FEATURES OVERVIEW

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

Configuration File Types Allowed

- **Web Configuration**

User can find the configuration in Web UI -> Maintenance-> Upgrade and Provisioning.

Authenticate Conf File ☒ No ☐ Yes

Firmware Key

Configuration File Types Allowed

- **Functionality**

This feature allows users to choose Allowed Configuration File Types, All or XML Only.

- **New P Values**

Pvalue	Description	Value range	Default
P8601	Configuration File Types Allowed	47 – All 46 – XML Only	47 – All

Additional Override DHCP Option

- **Web Configuration**

User can find the configuration in Web UI -> Maintenance-> Upgrade and Provisioning.

Allow DHCP Option 43 and Option 66 to Override Server ☐ No ☒ Yes

Additional Override DHCP Option

3CX Auto Provision ☐ No ☒ Yes

- **Functionality**

This feature allows users to configure additional DHCP Option to be used for the firmware server instead of the configured firmware server or the server from DHCP Option 43 and 66.

- **New P Values**

Pvalue	Description	Value range	Default
P8337	Additional Override DHCP Option	0 – None 1 – Option 150	0 – None

SRTP Key Length

User can find the configuration in Web UI -> Profile-> Audio Settings.

SRTP Mode Enabled But Not Forced ▾
SRTP Key Length AES 128&256 bit ▾
Crypto Life Time ☐ No ☒ Yes

- **Functionality**

This feature allows users to configure the cipher method or key length if SRTP is enabled.

- **New P Values**

Pvalue	Description	Value range	Default
P2383	SRTP Key Length	0 – AES 128&256 bit	0 - AES 128&256 bit
P2483		1 – AES 128 bit	
P2583		2 – AES 256 bit	
P2683			

With Secret Key Information

- **Web Configuration**

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

With Secret Key Information ☐ No ☒ Yes

Status STOPPED

- **Functionality**

This feature allows users to configure whether the packet capture file contains secret key information or not.

- **New P Values**

Pvalue	Description	Value range	Default
P22419	With Secret Key Information	0 – No 1 – Yes	1 – Yes

Security Controls for SSH Access

- Web Configuration**

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

SSH Port

Security Controls for SSH Access

Web Session Timeout

- Functionality**

This feature allows users to configure security privileges.

- New P Values**

Pvalue	Description	Value range	Default
P28210	Security Controls for SSH Access	0 – Only allow SSH private IP users to set system Pvalue 1 – Allow all SSH users to set system Pvalue 2 – Allow all SSH users to set any Pvalue 4 – Prohibit setting Pvalue	2 – Allow all SSH users to set any Pvalue

Enable using tags in URL

- Web Configuration**

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

Config File Postfix

Enable using tags in URL ☒ No ☐ Yes

Allow DHCP Option 43 and Option 66 to Override Server ☐ No ☒ Yes

- Functionality**

This feature allows users to enable using tags in Config Server Path.

- New P Values**

Pvalue	Description	Value range	Default
P8609	Enable using tags in URL	0 – No 1 – Yes	1 – Yes

FIRMWARE VERSION 1.0.5.4

PRODUCT NAME

GXW4216 V2, GXW4224 V2, GXW4232 V2, GXW4248 V2

DATE

08/10/2022

FIRMWARE FILE INFORMATION

- GXW4216 V2 firmware file name: gxw4216v2fw.bin
MD5: a29a51c155d4a022532317a90b4257d8
- GXW4224 V2 firmware file name: gxw4224v2fw.bin
MD5: c45cb6dd01f988a3ee6764dc2cf933c8
- GXW4232 V2 firmware file name: gxw4232v2fw.bin
MD5: 0367ae67830df2929af5a275ca073b68
- GXW4248 V2 firmware file name: gxw4248v2fw.bin
MD5: 96ae11e4682caacb20bd5ff59a8aa252

ENHANCEMENT

- Added support to send SNMP traffic through Management Interface. [Enable SNMP Through Management Interface]
- Added support to send Syslog traffic through Management Interface. [Enable Syslog Through Management Interface]

BUG FIX

- Fixed a bug that causes the core file to be generated after the device is turned on.
- Fixed download function of the page is display incorrect when accessing in User/Viewer account.
- Fixed device the log server domain name resolution order is incorrect.
- Fixed the copyright not translated into Russian on the Русский page.
- Fixed device will not send provision required when path contains the % character.
- Fixed the bug that causes IVR code reading is failed.
- Fixed an issue causes sometimes only one-way audio or no audio on both sides in the call.
- Fixed an issue that causes device faxes may not be sent and received normally.
- Fixed a WebUI error that causes the "Viewer Logout" button displayed as "XXXXX" in Chinese/Spanish/French language.
- Fixed an issue that causes the ATA device crash after it calls to itself.
- Fixed Dublin and Ireland are displayed incorrectly in Chinese in Time Zone.
- Fixed a bug that causes Call Waiting Tone syntax error.
- Fixed the incorrect description of 802.1X Mode.
- Fixed device the Syslog list will not be displayed when the system log level is EXTRA DEBUG.

- Fixed device cannot access the page and establish a call after unplugging and plugging the network cable on PPPoE and OpenVPN network.
- Fixed the web page lock time after the login error exceeds the limit will be timed again after clicking login again.

NEW FEATURES OVERVIEW

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

Enable SNMP Through Management Interface

- **Web Configuration**

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

Management access

Management interface only

Enable SNMP Through Management Interface

☐ Enabled
 ☒ Disabled

Enable Syslog Through Management Interface

☐ Enabled
 ☒ Disabled

- **Functionality**

This feature allows users to choose whether to route the Syslog packets through management interface.

- **New P Values**

Pvalue	Description	Value range	Default
P28209	Enable SNMP Through Management Interface	1 – Enabled 0 – Disabled	0 – Disabled

Enable Syslog Through Management Interface

- **Web Configuration**

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

Enable SNMP Through Management Interface

☐ Enabled
 ☒ Disabled

Enable Syslog Through Management Interface

☐ Enabled
 ☒ Disabled

IP Address Mode for Management Interface

☒ DHCP
 ☐ Static IP

- **Functionality**

This feature allows users to choose whether to route the Syslog packets through management interface

- **New P Values**

Pvalue	Description	Value range	Default
P8610	Enable Syslog Through Management Interface	1 – Enabled 0 – Disabled	0 – Disabled

FIRMWARE VERSION 1.0.3.9

PRODUCT NAME

GXW4216 V2, GXW4224 V2, GXW4232 V2, GXW4248 V2

DATE

08/08/2022

FIRMWARE FILE INFORMATION

- GXW4216 V2 firmware file name: gxw4216v2fw.bin
MD5: a29a51c155d4a022532317a90b4257d8
- GXW4224 V2 firmware file name: gxw4224v2fw.bin
MD5: c45cb6dd01f988a3ee6764dc2cf933c8
- GXW4232 V2 firmware file name: gxw4232v2fw.bin
MD5: 0367ae67830df2929af5a275ca073b68
- GXW4248 V2 firmware file name: gxw4248v2fw.bin
MD5: 96ae11e4682caacb20bd5ff59a8aa252

BUG FIX

- Fixed a bug that causes the device will ring with DND enabled.
- Fixed GXW4224V2 plays Priority Alert Call Waiting Tone incorrectly.
- Fixed GXW4224V2 plays Alternate Number Call Waiting Tone incorrectly.
- Fixed device cannot enable local call feature using a certain dial plan.
- Fixed the Firmware Server Path and the Config Server Path cannot save in "port/filename" format.
- Fixed the device does not prompt invalid input while entering illegal values in some parameters.
- Fixed a bug that caused the Syslog list information will not be cleared after hard key recovery.
- Fixed device off-hook LED status is wrong when LED Pattern config to A and existing voice mail.
- Fixed DTMF data sent in disorder.
- Fixed pressing flash +2 will hang up the other party's call after enabling flash digital control.
- Fixed a bug causes Second Register to have no auth header by default.
- Fixed REGISTER/INVITE failover retries are not the configured number.
- Fixed device does not prompt error "Max allow length 190" in local DNS.
- Fixed TIA-Inventory-Serial Number field is wrong in MAC address instead of Serial Number while captured in LLDP Wireshark trace file.

FIRMWARE VERSION 1.0.3.4

PRODUCT NAME

GXW4216 V2, GXW4224 V2, GXW4232 V2, GXW4248 V2

DATE

05/13/2022

FIRMWARE FILE INFORMATION

- GXW4216 V2 firmware file name: gxw4248v2fw.bin
MD5: 6d628edd385a256f64df26beed929a1d
- GXW4224 V2 firmware file name: gxw4224v2fw.bin
MD5 2b5ec23cdefd8d4ca1608a85b7b74f49
- GXW4232 V2 firmware file name: gxw4232v2fw.bin
MD5: c4b23a63861bd09e9456be1c100d71d4
- GXV4248 V2 firmware file name: gxw4248v2fw.bin
MD5: f92c28f2f7e918a7c6ffe684c7764779

ENHANCEMENT

- This is the initial release version of GXW42xx V2 firmware