
GXW450X Firmware Release Notes

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FIRMWARE VERSION 1.0.0.35

PRODUCT NAME

GXW4501/GXW4502/GXW4504

DATE

04/20/2020

FIRMWARE FILE INFORMATION

- GXW450X firmware file name: gxw4500fw.bin
- MD5 checksum: a506c2558c747ac7653bd7a2598c1c59

IMPORTANT UPGRADING NOTES

- **Please upgrade to 1.0.0.35 immediately for the latest security patches.**
- **After upgrading to 1.0.0.35, please change the web access passwords for all users created in the Maintenance→User Management page. This includes super admin and admins. It is also highly recommended to change the usernames to be different from previous usernames.**

CHANGES SINCE FIRMWARE 1.0.0.29

ENHANCEMENTS

- [Interface Settings] Added ability to select a different E1/T1 port to use for the line's data channel when SS7 is selected as the signaling type. [SS7 PORT SELECTION FOR DATA CHANNEL]
- [Provisioning] Added provisioning support for the following parameters: VoIP Trunks->From User, Send PPI Header, PPI Mode, DOD as From Name, DOD settings, Outbound Route->Enable Filter on Source Caller ID and Custom Dynamic Route, Inbound Route->Set Caller ID Info/CallerID Name/CallerID Number, Interface Settings->Tone Region, SNMP, DDNS, Login Whitelist, and Alert Events List.
- [Security] Added ability to select the minimum and maximum TLS versions to support. [CONFIGURABLE TLS VERSION SUPPORT]
- [SNMP] Added SNMP support. [SNMP SUPPORT]
- [VoIP Trunks] Added options *From User*, *Send PPI Header*, *PPI Mode*, and *DOD as From Name*.

BUG FIXES

- [Security] Fixed several security vulnerabilities.
- [Digital Trunks] Fixed an issue with E1 SS7 connections.
- [HTTP Server] Fixed an issue where HTTP server settings could not be modified after toggling on *Enable Address Whitelist*.
- [Provisioning] Fixed an issue with changes made via provisioning not being reflected in the web portal.
- [Provisioning] Fixed an issue where inbound routes could still be provisioned even if it exists, creating duplicate inbound routes.
- [Routing] Fixed an issue with extension CID being used when *Keep Trunk CID* is enabled.
- [SIP Settings] Fixed an issue where 183 Ringing would be sent in calls through PRI even if *Generate In-band Ringing* is set to "Never".
- [Web] Fixed an issue where *RTP Timeout* and *RTP Hold Timeout* fields would still be highlighted red after entering valid values.

NEW FEATURES OVERVIEW

SS7 PORT SELECTION FOR DATA CHANNEL

Users can now specify a different E1/T1 port to use for each port's data channel when SS7 is selected as the signaling type. The first dropdown list specifies the E1/T1 port to use. The second dropdown list specifies the channel to use for data connections.

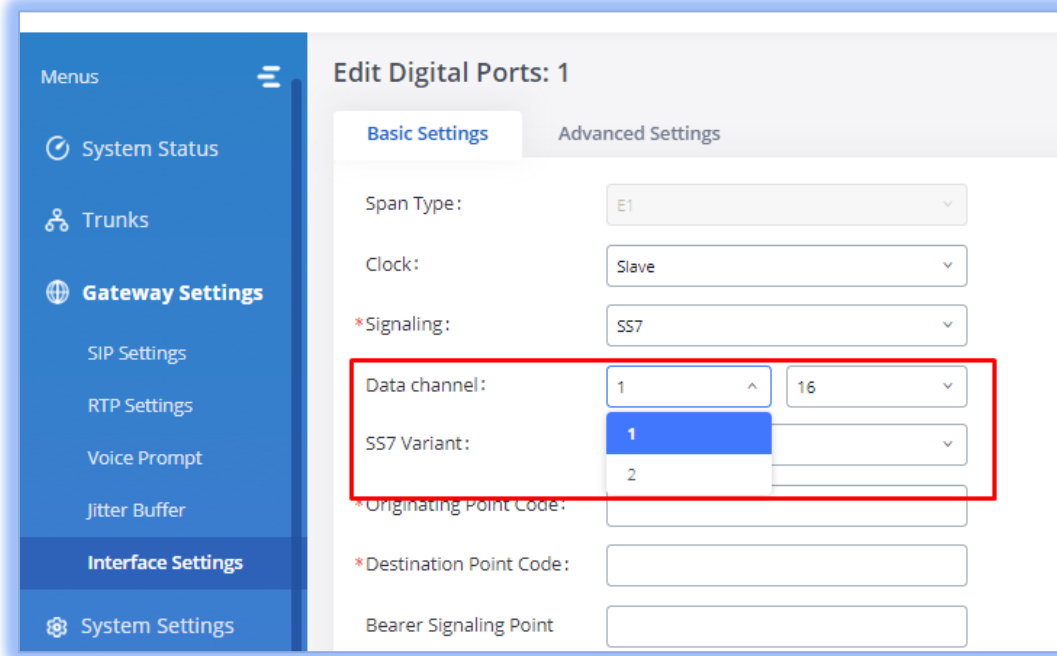


Figure 1 - SS7 Data Channel Selection

CONFIGURABLE TLS VERSION SUPPORT

Users can now select the minimum and maximum versions of TLS for the GXW450x to support. The setting can be found under *System Settings* → *Security Settings* → *TLS Security* page.

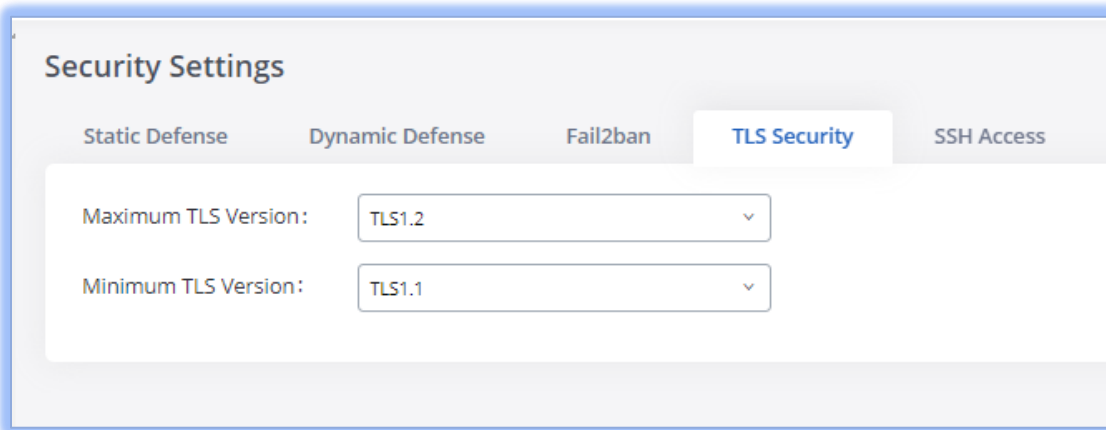


Figure 2 - TLS Security

SNMP SUPPORT

SNMP is now available and can be configured from *System Settings* → *SNMP*.

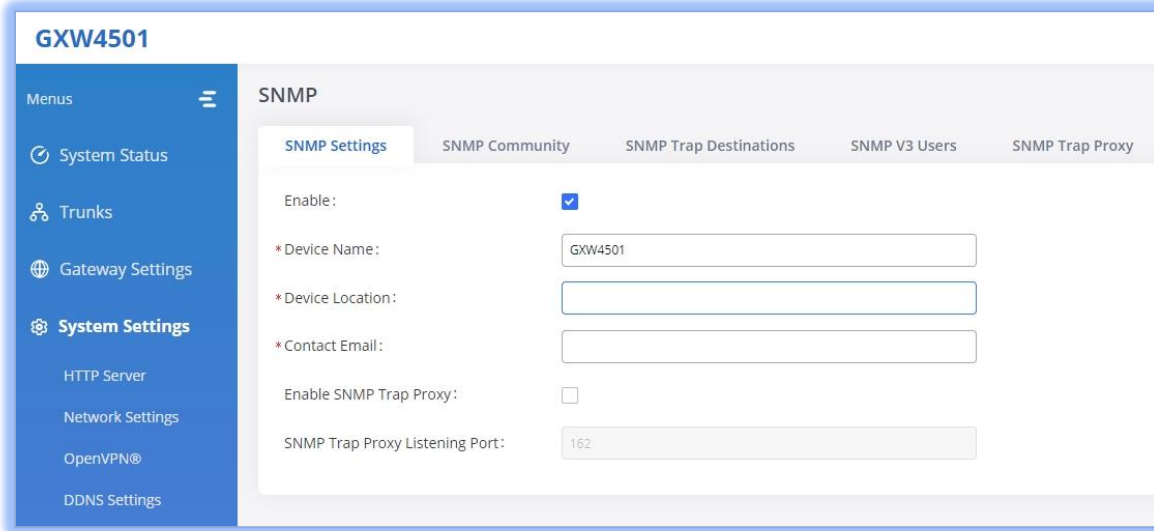


Figure 3 - SNMP page

SNMP support allows GXW450x to be monitored by network management tools. GXW450x can send traps (alert messages) directly to an SNMP manager or can serve as a proxy server for traps.

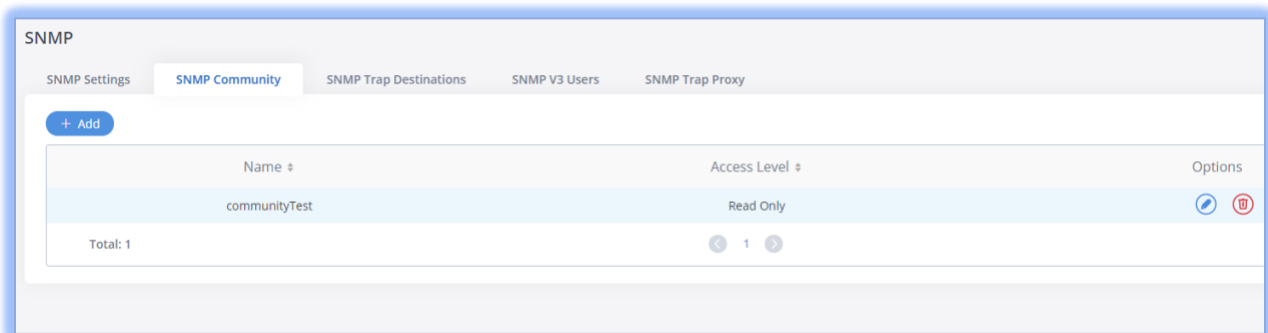


Figure 4 - SNMP Community

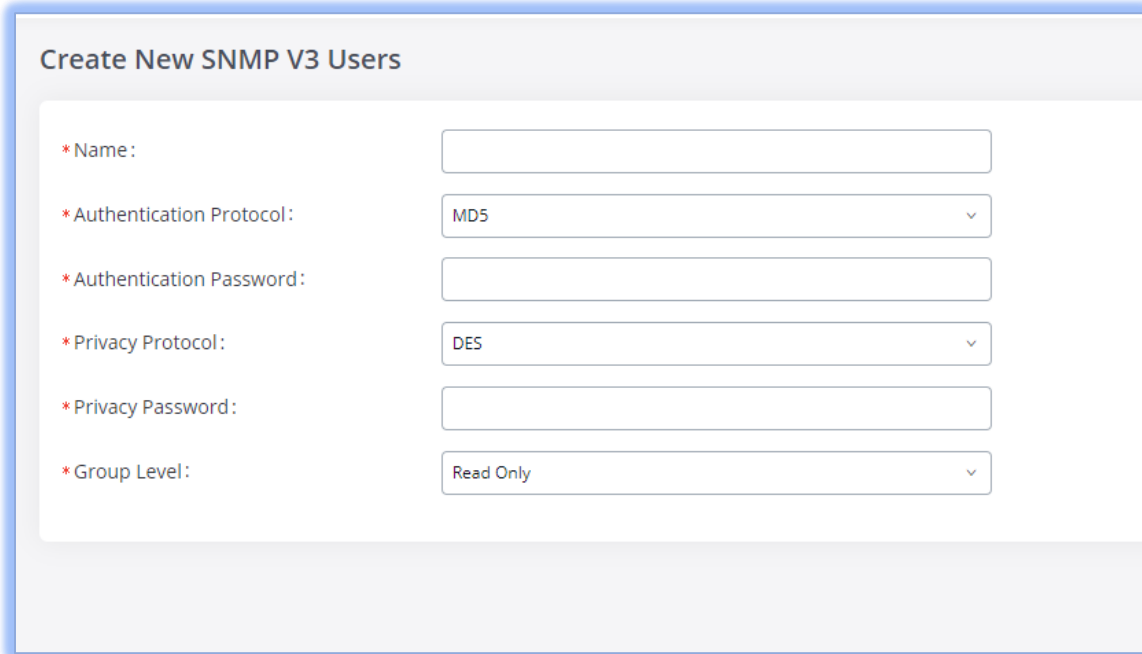
The SNMP Community page allows users to configure the GXW450x's community strings, allowing it to determine whether or not to respond to SNMP requests from clients. Two access levels are available: Read Only and Read/Write.



Figure 5 - SNMP Trap Destinations

In the **SNMP Trap Destinations** page, users can point to where the device's traps should be sent to, set

the community string to use, and specify the type of notifications to send.



Create New SNMP V3 Users

* Name:

* Authentication Protocol:

* Authentication Password:

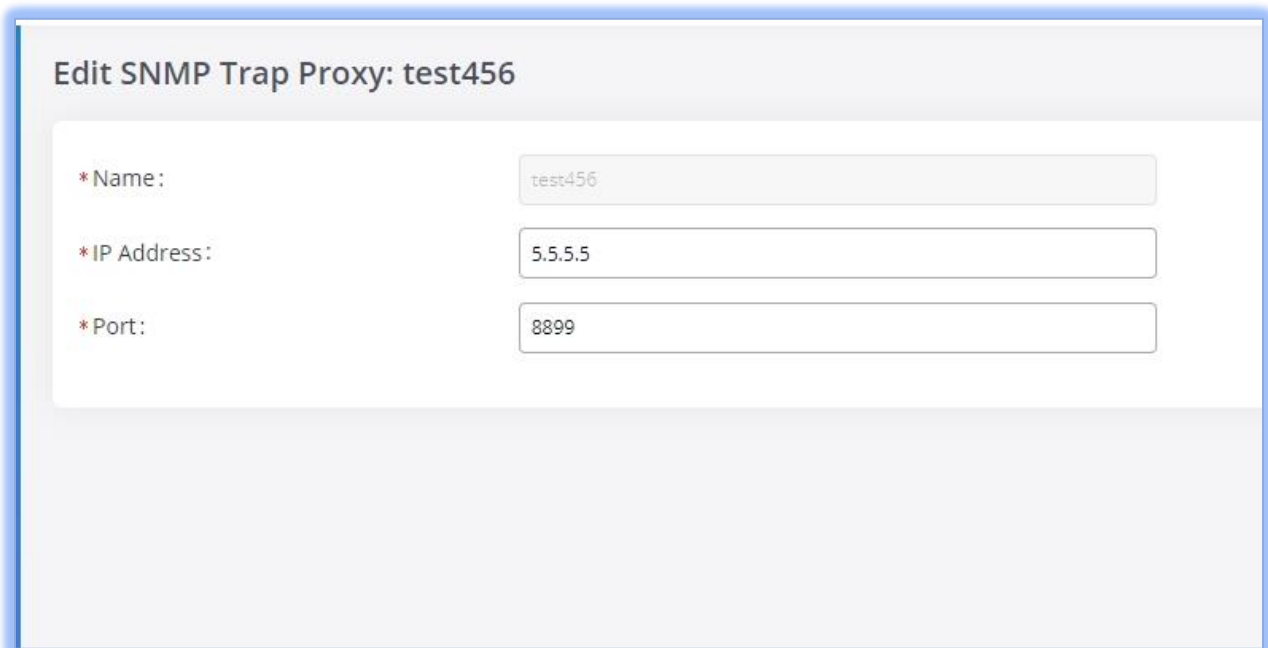
* Privacy Protocol:

* Privacy Password:

* Group Level:

Figure 6 – SNMP v3 Users

The **SNMP V3 Users** page will allow the configuration of SNMPv3 users for enhanced security.



Edit SNMP Trap Proxy: test456

* Name:

* IP Address:

* Port:

Figure 7 - Trap Proxy

The GXW450x can act as a proxy server for trap messages. To use this feature, users will need to first

toggle on the *Enable SNMP Trap Proxy* setting and configure the *SNMP Trap Proxy Listening Port* field in the *SNMP Settings* tab. They will then need to go to the *SNMP Trap Proxy* → *Edit SNMP Trap Proxy* page to configure the server address and listening port of the SNMP manager the traps will be forwarded to.

FIRMWARE VERSION 1.0.0.29

PRODUCT NAME

GXW4501/GXW4502/GXW4504

DATE

09/24/2019

FIRMWARE FILE INFORMATION

- GXW450X firmware file name: gxw4500fw.bin
- MD5 checksum: 3c117760837283146d8bc61aa60063fb

CHANGES SINCE FIRMWARE 1.0.0.27

ENHANCEMENTS

- [Interface Settings] Added the ability to configure tone region.
- [VoIP Trunks] Added the ability to configure DODs for VoIP trunks.

BUG FIXES

- [Basic Call] Fixed an issue with audio cutoff when there is simultaneous audio from both caller and callee.
- [Provisioning] Fixed an issue with receiving configuration updates and firmware upgrades when the device is using PPOE.

KNOWN ISSUES

- [Jitter Buffer] Jitter buffer does not work occasionally when buffer size is set to *Adaptive*.
- [HTTP Server] When *HTTP→Enable IP Address Whitelist* is toggled on, users will be unable to modify the page.
- [Routing] When receiving a call from a peer trunk and when outbound routes to the peer trunk and an E1/T1 trunk use the same pattern rules, the call may loop back to the peer trunk.
- [Routing] Calls will drop if there is a comma in the *Trunks→Inbound Routes→Edit Inbound Route→Set CallerID Info→CallerID Name* field.

- [Routing] Unsupported characters \ ; “ can be entered into the *Trunks*→*Inbound Routes*→*Edit Inbound Route*→*Set CallerID Info*→*CallerID Name* field.
- [Time Settings] When using 12-hour format, times between 12PM – 1PM will display AM instead of PM.

FIRMWARE VERSION 1.0.0.27

PRODUCT NAME

GXW4501/GXW4502/GXW4504

DATE

08/22/2019

FIRMWARE FILE INFORMATION

- GXW450X firmware file name: gxw4500fw.bin
- MD5 checksum: 382d338e39e22388e1ca9e44f2001780

CHANGES SINCE FIRMWARE 1.0.0.24

ENHANCEMENTS

- [Provisioning] All configuration options can now be provisioned except for those in the following pages: Digital/VoIP Trunks, Inbound/Outbound Routes, Interface Settings, and DDNS Settings.
- [Provisioning] Added GAPS provisioning support.
- [Routing] Added the **Set Caller ID** option to the *Edit Inbound Rule* page. [MANIPULATING CALLER ID FOR INBOUND CALLS]
- [Routing] Added the **Enable Filter on Source Caller ID** option to the *Edit Outbound Rule* page. This option will allow only callers with the specified CID pattern to use the outbound route. BUG FIXES
- [Provisioning] Fixed several provisioning issues.
- [System Events] Fixed an issue with periodic alerts not sending properly after upgrading firmware.
- [Web] Fixed an issue with the "Apply Changes" button not appearing in the Maintenance->Upgrade page after making changes.
- [Web] Fixed an issue with the Dashboard->Interface Status->Digital indicator displaying incorrectly when the Gateway Settings->Interface Settings->Basic Settings->Data Channel is set to "1".

NEW FEATURES OVERVIEW

MANIPULATING CALLER ID FOR INBOUND CALLS

Users can now manipulate the callerID number and names for inbound calls by editing a syntax.

Create New Inbound Rule

*Trunks:

*Pattern:

CallerID Pattern:

Set CallerID Info:

*CallerID Name:

*CallerID Number:

CallerID Number Syntax Explanation:

- **`\${CALLERID(num)}`**: Default value which indicates the number of an incoming caller (CID). The CID will not be modified.
- **`\${CALLERID(num);n}`**: Skips the first n characters of a CID number, where n is a number.
- **`\${CALLERID(num);-n}`**: Takes the last n characters of a CID number, where n is a number.
- **`\${CALLERID(num);s;n}`**: Takes n characters of a CID number starting from s+1, where n is a number and s is a character position (e.g. ``${CALLERID(num);2;7}`` takes 7 characters after the second character of a CID number).
- **n`\${CALLERID(num)}`**: Prepends n to a CID number, where n is a number.

CallerID Name Syntax Explanation:

- **`\${CALLERID(name)}`**: Default value. Indicates the name of an incoming caller.
- **A`\${CALLERID(name)}B`**: Prepend a character 'A' and append a character 'B' to ``${CALLERID(name)}``.
- Inputting text without any syntax will set a fixed name for CID Name.

KNOWN ISSUES

- [Routing] When receiving a call from a peer trunk and when outbound routes to the peer trunk and an E1/T1 trunk use the same pattern rules, the call may loop back to the peer trunk.

FIRMWARE VERSION 1.0.0.24

PRODUCT NAME

GXW4501/GXW4502/GXW4504

DATE

06/06/2019

FIRMWARE FILE INFORMATION

- GXW450X firmware file name: gxw4500fw.bin

MD5 checksum: c1319547317e5571b12a79e497c97e02

CHANGES/ENHANCEMENT

- Internal bug fixes

FIRMWARE VERSION 1.0.0.22

PRODUCT NAME

GXW4501/GXW4502/GXW4504

DATE

04/26/2019

FIRMWARE FILE INFORMATION

- GXW450X firmware file name: gwx4500fw.bin

MD5 checksum: 8988e06dd7730439d1a0623438e5dc45

CHANGES/ENHANCEMENT

- Fixed issue that E1 option "PRI Indication" can't take effect
- Fixed issue that enabled static route may turn to disabled in few circumstances, including upgrading firmware, changing router/switch mode, or rebooting unit.
- Internal bug fixes

KNOWN ISSUE

- Static IPv6 configuration page has no default gateway option. Need to manually add static route with destination ::/0 as default route.

FIRMWARE VERSION 1.0.0.20

PRODUCT NAME

GXW4501/GXW4502/GXW4504

DATE

04/04/2019

FIRMWARE FILE INFORMATION

- GXW450X firmware file name: gxw4500fw.bin

MD5 checksum: 46b423b21550e9043bbc042026618669

CHANGES/ENHANCEMENT

- Fixed issue that Dynamic IPv6 WAN mode will need manually adding default gateway into static route. Now Dynamic IPv6 on WAN should work without need of manual configuration of static route.
- Fixed issue that importing inbound report csv file will fail if no existing inbound route configured.
- Fixed issue that Router model with PPPoE WAN setting will cause LAN device fail to connect internet.
- Internal bug fixes

KNOWN ISSUE

- Static IPv6 configuration page has no default gateway option. Need to manually add static route with destination ::/0 as default route.
- Enabled static route may turn to disabled in few circumstances, including upgrading firmware, changing router/switch mode, or rebooting unit. However, the static route still functioning as enabled, and reboot will fix the display issue.
- E1 option "PRI Indication" can't take effect

FIRMWARE VERSION 1.0.0.18

PRODUCT NAME

GXW4501/GXW4502/GXW4504

DATE

03/22/2019

FIRMWARE FILE INFORMATION

- GXW450X firmware file name: gxw4500fw.bin
- MD5 checksum: f62de1499dbec183cd779a052f321459

IMPORTANT UPGRADING NOTE

- This is first release of GXW450X

KNOWN ISSUE

- Router model with PPPoE WAN setting will cause LAN device fail to connect internet.
- After upgrade from older firmware version to 1.0.0.18. Enabled static route may turn to disabled. However, it's still functioning as enabled. Reboot will fix the display issue.
- Import inbound report csv file will fail if no existing inbound route configured. Manually add one inbound route will fix the issue.
- Dynamic IPv6 WAN mode will need manually adding default gateway into static route.