**GSC3570 Firmware Release Notes**

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FIRMWARE VERSION 1.0.5.12

PRODUCT NAME
GSC3570 (Boot: 1.0.5.9; Core: 1.0.5.9; Base: 1.0.5.9; Prog: 1.0.5.9; Locale: 1.0.5.9)

HW Supported: 1.0A, 1.1A, 1.2A, 1.3A, 1.4A

DATE
05/12/2021

SUMMARY OF UPDATE
The main purpose of this release is bug fixes and features enhancement.

Factory Reset Required:
- Factory Reset is required if upgraded from firmware 1.0.3.1 or before, to initialize all internal parameters correctly.
- SD Card must be formatted via touch screen UI before using for storage.

ENHANCEMENT
- Added “System Uptime” under “System info” display at Touch UI.
- Added scheduled auto reboot to improve device stability.
- Implemented dial plan process at GUI side.
- Added language support for Polish and Czech.
- Improved open door via GDS37xx w/o SIP call by adding “Virtual Button” (need enable “Display Open Door Icon at Desktop”) at GSC3570 main screen of touch UI for paired GDS37xx (GDS3710 FW1.0.7.23, GDS3705 FW1.0.1.16 or above required).
- Added “enable open door icon” at both LCD and Web UI.
- Enabled “Download system information” API.
**BUG FIX**

- Fixed pressing # redial failed, and Account1 clicking number switching to Account2 also failed to call.
- Fixed after somewhat, touch UI lagging issue.
- Fixed select number in the call record the device still playing off hook tone.
- Fixed touch UI to modify IPC data, then delete it immediately will cause UI crash and device reboot.
- Fixed video preview not working when pairing with 3rd party device like 2N IP Intercom.
- Fixed alarm call no video if callee is a video phone or IP camera.
- Fixed VPN address not displayed in touch UI and web UI of network status.
- Fixed SNMP update interval not taking effect.
- Fixed distorted audio when using URI Music On Hold.
NEW FEATURES OVERVIEW
This section lists major new features or improvement and describes how to use them from the user’s point of view.

SYSTEM UPTIME

• **Touch UI**

This uptime can now be viewed at Touch UI by selecting: Settings → System info:

<table>
<thead>
<tr>
<th>System info</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware version</td>
</tr>
<tr>
<td>P/N</td>
</tr>
<tr>
<td>U-boot version</td>
</tr>
<tr>
<td>Kernel version</td>
</tr>
<tr>
<td>System version</td>
</tr>
<tr>
<td>Certificate verification</td>
</tr>
<tr>
<td><strong>System up time</strong></td>
</tr>
</tbody>
</table>

• **Functionality**

This feature enhancement is replying for request from field. Now customers can just touch the screen to check how long the device is running up since last booting.
SCHEDULED AUTO REBOOT

- **Web Configuration**

  The setting can be found at: Maintenance → Automatic Reboot:

  ![Automatic Reboot Configuration]

- **Functionality**

  This feature is implemented to improve the stability of the GSC3570.

  Issue was reported from field the device will be lagging to response the touch UI operation, and the incoming call will not have ringtone played. Issue will be cleared after reboot.

  Depending on the installation environment, the problem can randomly happen in a week or after several weeks since last reboot.

  Engineering doubt this might caused by the Linux Kernel. To avoid this issue and make the device running more reliably, the scheduled auto-reboot implemented.

  Users can base on their network environment to configure the GSC3570 to automatically reboot at selected time daily, weekly or monthly. This will help to make the GSC3570 running healthy and robust, improve the stability of the application solution.
VIRTUAL BUTTON OPEN DOOR AT DESKTOP

The touch UI is improved by adding “Virtual Button” at desktop for open door by pairing GSC3570 and GDS37xx. This feature needs to be configured in both web UI and touch UI before working correctly.

This feature needs related matching GDS37XX firmware to work. The firmware needs:

- **GDS3710**: above 1.0.7.23;
- **GDS3705**: 1.0.1.16 or above

**Web Configuration:**

Below are screenshot of GDS37XX and GSC3570 in related configuration:

- **GDS37XX**:

  ![Door System Settings](image)

  From GDS37XX side, the configuration is the same. Only difference is the number of doors be controlled:
  - If using GDS37XX Local Relay, maximum TWO DOORS can be controlled.
  - If using GSC3670 Relay, ONLY ONE DOOR can be controlled.

The PIN and other settings are the same as SIP remote open door or GSC3570 secure open door. The difference will come out at the touch screen UI operation of GSC3570.
➢ **GSC3570**: *(both web UI and touch UI required to be configured)*

1) **The GSC3570 web UI configuration will be in “Settings → External Service”**

![GSC3570 web UI configuration screen](image)

Also, the web UI configuration in “Maintenance → LCD Access → Door settings”:

![Door settings panel](image)

The “Open Door icon on LCD” need to be “Enabled”.

As shown in above, once configured, the GSC3570 will control GDS37xx open door in the touch screen UI.
2) The GSC3570 touch UI configuration:

Touch UI will select "Monitor" icon and choose "Door system", related GDS37xx required to be selected and configured correctly with the remote open door PIN to match the related GDS37xx:

<table>
<thead>
<tr>
<th>Device name</th>
<th>Device number</th>
<th>Device IP address</th>
<th>Door 1</th>
<th>Door 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front_Door</td>
<td>873</td>
<td>Front_Door</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Back_Door</td>
<td>877</td>
<td>Back_Door</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDS3710</td>
<td>192.168.11.128</td>
<td>Door1, Door2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDS3705</td>
<td>8606</td>
<td>IP1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GSC3620</td>
<td>192.168.11.203</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Display opendoor icon at desktop**
  - Only display opendoor icon from one GDS, device later configured will overwrite previous one.
• Functionality

This improvement feature is requested by customers and implemented to meet customers application requirement, where GDS37XX paired with GSC3570 to open door, NO SIP CALL required.

Once configured correctly, the GSC3570 will open door by just pressing the virtual button at the desktop.

➢ GSC3570 Virtual Button Open Door (w/o SIP Call):

At the GSC3570 idle screen, once configured correctly, there will be one or two virtual buttons displayed at lower left corner of the screen. If one door configured, one button will be displayed; if two doors configured, two buttons will be displayed.

Press the related virtual open door button, the related door will be opened accordingly.

Below is what the GSC3570 idle screen looked like after correct configuration:
Below is the pop up prompt displayed at GDS3570 idle screen after pressing the virtual button to perform a successful open door operation:

![GDS Action: open door success]

Touch the top right corner, the Panel will then display to show the detailed information of those icons in top column.

Depending on how many doors to control, one or two virtual button will be displayed.

**NOTE:**

- Only **ONE** GDS37xx can be paired with GSC3570 for such Virtual Button Open Door
- If user configured multiple GDS37xx for such Virtual Button Open Door, the device would **NOT** prompt the error but the new input will overwrite the old input, and only the LAST input GDS37xx will work with corresponding Virtual Button in GSC3570.
DIAL PLAN

The GSC3570 now can be configured with dial plan to better working with related IPPBX or UCM.

The setting can be found at: Accounts → Account X → Dialplan:

The dial plan needs to be configured in the SIP account used.

- **Functionality**

This feature is implemented based on the request from customers and system integrators, as well as ITSP service provider customers, to allow dial plan be programmed and used for better dialing control and experience.
POLISH AND CZECH LANGUAGE SUPPORT

The added new language selection can be found in web UI up right corner as shown below. Just select related language will apply immediately.

The language selection can also be found in touch UI: Settings → Language:
For detailed information, please refer to User Manual and Resource Center:

- **GSC3570 User Manual:**

- **GSC3570 Resource Center:**
  [http://www.grandstream.com/support/resources/?title=GSC3570](http://www.grandstream.com/support/resources/?title=GSC3570)
FIRMWARE VERSION 1.0.5.9

PRODUCT NAME
GSC3570 (Boot: 1.0.5.9; Core: 1.0.5.9; Base: 1.0.5.9; Prog: 1.0.5.9; Locale: 1.0.5.9)
HW Supported: 1.0A, 1.1A, 1.2A, 1.3A, 1.4A

DATE
12/25/2020

SUMMARY OF UPDATE
The main purpose of this release is bug fixes and features enhancement.

Factory Reset Required:
• Factory Reset is required if upgraded from firmware 1.0.3.1 or before, to initialize all internal parameters correctly.
• SD Card must be formatted via touch screen UI before using for storage.

ENHANCEMENT
• Added “Proxy Video Compatibility Mode” to work with ITSP provider.
• Improved touch UI at Monitor where devices are difficult to select and call.
• Improved touch UI by displaying 2 open door icons for door system with 2 door configuration
• Added turn on LCD when device in energy save mode (LCD Off) but secure open door event happened.
• Added Panel in idle screen (top right corner) to display detailed information.
• Added remote open door via GDS without SIP call.
• Added functioning as doorbell and direct open door (if connected to strike).
• Added screen snapshot feature during RTSP streaming or SIP Video Call.
• Added H.265 RTSP stream support with maximum 720p 3Mbps@30fps.
BUG FIX

- Fixed in Monitor touch UI adding a device then modify will result error.
- Fixed changing “São Paulo” time zone not switch to UTC-3 when DHCP Option 2 disabled.
- Fixed unable to access Contact/Group Management/Call History page and system info page automatically generate core file.
- Fixed device not obtain 802.1x network if modifying MTU then unplug/plug network cable.
NEW FEATURES OVERVIEW
This section lists major new features or improvement and describes how to use them from the user’s point of view.

PROXY VIDEO COMPATIBILITY MODE

• **Web Configuration**

This option can be found under device web UI → Accounts → Account X → Codec Settings:

**Video Settings**

<table>
<thead>
<tr>
<th>Setting</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>H.264 Image Size</td>
<td>VGA</td>
</tr>
<tr>
<td>H.264 Profile Type</td>
<td>Baseline Profile</td>
</tr>
<tr>
<td>Video Bit Rate</td>
<td>512 Kbps</td>
</tr>
<tr>
<td>H.264 Payload Type</td>
<td>99</td>
</tr>
<tr>
<td>Enable Proxy Video Comp</td>
<td>Yes</td>
</tr>
</tbody>
</table>

• **Functionality**

This feature enhancement is designed for some ITSP customers that providing video phone call service. Because GSC3570 does not have camera, this enhancement will improve the video call by sending some fake video packets to notify the proxy then displaying black screen on the other side of the video phone.

**NOTE:**

• By default this feature is disabled.
• This feature only works with the proxy server of related ITSP, it will be useless for normal users.
DISPLAY 2 OPEN DOOR ICONS FOR GDS37XX WITH 2 DOOR CONFIGURED

- **Web Configuration**

GDS37XX side configuration:

![GDS3705 Web Configuration](image)

GSC3570 side configuration:

![GSC3570 Web Configuration](image)
• **Functionality**

This feature is designed to display 2 open door icons at the touch screen UI, so the user can press different icon to open different door, if the GDS37XX is configured to control two different door, like Front Door, Back Door or Garage Door.

The GDS37XX need to be configured correctly to open two doors, and the GSC3570 needs to match the setting correctly. The sample configurations are listed in above screenshot.

When GSC3570 answered the door bell call, the related touch screen UI will display two open door icons, user can then decide which virtual button to press and open the corresponding door. The screenshot is like below:

The above IP1 and IP2 is mapped to Door1 and Door2, in the sample screenshot of GDS3705 and GSC3570 related configuration page.
ADDED PANEL IN IDLE SCREEN TO DISPLAY DETAILED INFORMATION

The touch UI is improved with Panel in idle screen (at top right corner) to display detailed information about the GSC3570.

For example, from below screenshot, user will know that the GSC3570 is using PoE power on, with SD card inserted for storage, and the FTP server is turned on to receive the alarm snapshot of IP cameras:
Touch the top right corner, the Panel will then display to show the detailed information of those icons in top column:

<table>
<thead>
<tr>
<th>Time</th>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>21:35 Thu 12-24-2020</td>
<td>Registered</td>
<td></td>
</tr>
<tr>
<td>8608</td>
<td>FTP server</td>
<td>ftp://192.168.11.138:21/</td>
</tr>
<tr>
<td>SD card</td>
<td></td>
<td>11.51GB/58.24GB</td>
</tr>
<tr>
<td>IPv4</td>
<td></td>
<td>192.168.11.138</td>
</tr>
</tbody>
</table>

- GSC3570 is registered to SIP server with extension number 8608
- FTP server is running with device's IP and Port 21
- SD card available 58.24GB (formatted from 64GB) with usage 11.51GB.
- Device IP is 192.168.11.138.

**NOTE:**

- Touch related field with “>” can jump directly to the related configuration UI.
- When the LCD is turned OFF and in energy saving mode, but a secure open door event happened, the LCD will turn ON to light up and display open door icon with a long “beep” to notify user an open door event happened.
DOORBELL AND DOOR OPENER

The GSC3570 now can behave like doorbell and open door directly if the door strike is wired directly to the relay control port of GSC3570.

For licensed electrician, this is a perfect digital upgrade solution for users with broken traditional analogue door bell system. The existing wiring and switch can be connected to GSC3570 so visitors pressing the door switch the GSC3570 will play DING-DONG doorbell tone. If connecting the electrical strike directly to the GSC3570 relay control port, then user can press the Open Door Icon from GSC3570 to open door directly. It can combine with GSC36xx IP camera to form a solution package. Like below:

GSC3570 as Digital Doorbell

![Diagram of GSC3570 as Digital Doorbell]

- EI set as DoorBell in Arming Mode, wired to outside Doorbell.
- GSC3570 plays DING-DONG tone when Doorbell pressed, the touch screen will pop up open door window, pressing the “Open” button to open door from inside.

The wiring example of GSC3570 as doorbell and open door:

GSC3570 as Upgraded Doorbell and Door Opener

![Wiring Diagram of GSC3570 as Upgraded Doorbell and Door Opener]
Functionality

This feature is designed to allow GSC3570 to be functioned like traditional doorbell, and open door if wired to electric lock, a simple digital upgrade to traditional (broken) doorbell. If combined with IP camera, it can help to monitor and update the home security without pay the subscription fee usually involved for such service.

Wiring:
A switch (doorbell button) need to be wired to AIN1 (Blue), AIN2(Brown) or AIN3 (Grey) and Ground (Black). The label is silk printed in the back of GSC3570 and a cable with color code is provided with the package. Maximum 3 switch/button can be connected (e.g.: Front Door, Back Door, Garage Door) But ONLY 1 electrical lock or strike can be controlled (because GSC3570 only has 1 relay control port (COM1, NO1/NC1)

Configuration: (Touch UI)
Below are the screenshots of how to configure and enable this feature. This feature is revised from Zone/Alarming feature, therefore THREE steps are required:

I. DO mode set to “Alarm out” or “Open door”:
   a. From touch UI, press “Settings”, select “DO settings”
   b. Choose “DO mode”, select “Alarm out” if no door strike connected and only want to ringing Ding-Done doorbell tone. No virtual open door button will be displayed in Alarm Message.
   c. Choose “Open door” if COM1, NO1/NC1 connected to strike to control door opening. Green virtual open door button when be displayed in Alarm Message when doorbell switch pressed
   d. press “<” to exit and select “√” sign to save the change just made.
II. **Edit Zone setting for Doorbell:**
   a. From touch UI, press "Settings", select “Zone settings”
   b. Press "Zone settings", default there are 4 zones, Only Zone2, Zone3 and Zone4 are switch input which can be used for Doorbell switch (Zone 1 is input requiring power). Press related Zone (2 to 4) to edit. The screenshot for example, Zone2 is changed name to Front as “Front Door” and “Zone type” is changed to “Doorbell”. Press the up right corner “√” sign to save the change just made. Then exit to “Setting” UI page.

<table>
<thead>
<tr>
<th>Zone name</th>
<th>Zone type</th>
<th>NO/NC</th>
<th>Alarm type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone 1</td>
<td>Infrared</td>
<td>NO</td>
<td>Delay alarm 30s / 0s</td>
</tr>
<tr>
<td>Front</td>
<td>Doorbell</td>
<td>NO</td>
<td>------</td>
</tr>
<tr>
<td>Zone3</td>
<td>Doorbell</td>
<td>NO</td>
<td>------</td>
</tr>
<tr>
<td>Zone 4</td>
<td>Doorbell</td>
<td>NO</td>
<td>------</td>
</tr>
</tbody>
</table>

![Zone settings screenshot](image)

![Zone details screenshot](image)
III. Enable the Arming mode to enable the doorbell:
   a. Press “Arming mode” to enable the change in above Step I.
   b. Select the Arming mode used. For example, “Outdoor” is selected because the doorbell is located at outside.
   c. Swipe the grey button to enable the feature, the button will become blue when enabled. Like below screenshot,
   d. Press “<” icon to exist the configuration to idle screen. The “Arming status” icon will change color (green) to show the device is “Armed”, or the feature is enabled.

<table>
<thead>
<tr>
<th>Arming mode</th>
<th>Zone name</th>
<th>Zone type</th>
<th>NO/NC</th>
<th>Alarm type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outdoor</td>
<td>Zone 1</td>
<td>Infrared</td>
<td>NO</td>
<td>Delay alarm 30s / 0s</td>
</tr>
<tr>
<td>Indoor</td>
<td>Front</td>
<td>Doorbell</td>
<td>NO</td>
<td>-----</td>
</tr>
<tr>
<td>Sleeping</td>
<td>Zone3</td>
<td>Doorbell</td>
<td>NO</td>
<td>-----</td>
</tr>
<tr>
<td></td>
<td>Zone 4</td>
<td>Doorbell</td>
<td>NO</td>
<td>-----</td>
</tr>
</tbody>
</table>
Now press the doorbell or switch (AIN1 and GND short circuit), “DING DONG” door bell tone will be played at GSC3570, a green open door virtual button will be displayed in the screen (if configured and wired the strike). Press the green “Open door” virtual button, the relay will take reaction to open the door.

The GSC3570 top right corner will also display a door opened icon and an “alarm” icon and “Message” will be displayed with front and back red LED flashing, reminding there is a open door (alarming) event happened. Press the “Messages” icon to check what is the message then exit the UI, the alarm message and the flashing LEDs will disappear.
### Messages

<table>
<thead>
<tr>
<th>Zone</th>
<th>Type</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front</td>
<td>Doorbell</td>
<td>12-25-2020 16:39:17</td>
</tr>
<tr>
<td>Front</td>
<td>Doorbell</td>
<td>12-25-2020 16:39:16</td>
</tr>
<tr>
<td>Front</td>
<td>Doorbell</td>
<td>12-25-2020 16:38:46</td>
</tr>
<tr>
<td>Front</td>
<td>Doorbell</td>
<td>12-25-2020 16:38:45</td>
</tr>
<tr>
<td>Front</td>
<td>Doorbell</td>
<td>12-25-2020 16:38:36</td>
</tr>
<tr>
<td>Zone 4</td>
<td>Doorbell</td>
<td>12-25-2020 16:20:15</td>
</tr>
</tbody>
</table>

*Images of screenshots showing the interface with messages displaying Doorbell events and options to open doors.*
OPEN DOOR VIA GDS37XX W/O SIP CALL

- Web Configuration

This feature needs related matching GDS37XX firmware to work. The firmware needs:
- GDS3710: above 1.0.7.19;
- GDS3705: 1.0.1.13 or above

Both firmware are under QA testing and not released yet at the moment, but will be available very soon.

Below are screenshot of GDS37XX and GSC3570 in related configuration:

- **GDS37XX:**

  From GDS37XX side, the configuration is the same. Only difference is the number of doors be controlled:
  - If using Local Relay controlled by GDS37XX, TWO DOORS can be controlled.
  - If using GSC3670 Relay, ONLY ONE DOOR can be controlled.

  The PIN and other settings are the same as SIP remote open door or GSC3570 secure open door.

  The difference will come out at the touch screen UI operation of GSC3570.
➢ **GSC3570:**

The GSC3570 web UI configuration will be in “Settings → External Service”

As shown above, once configured, the GSC3570 will control GDS3705 open door in the touch screen UI.

- **Functionality**

This feature is requested by customers and implemented to meet customers application requirement, where GDS37XX paired with GSC3570 to open door, NO SIP CALL required.

Once configured correctly, the GSC3570 will open door in two modes:

➢ **Doorbell or SIP Call:**

This is as previous firmware, when GSC3570 established call with GDS37XX, the screen will display virtual open door button(s), user will press the button to open door:
➢ **GSC3570 Open Door NO SIP Call:**

This is a new feature. At the GSC3570 idle screen, press "Monitor → Door system", the related GDS37XX will be displayed. In the blue bar, left is a “Phone” icon and right is the “Open door” icon. The “Phone” icon will establish SIP call as previous firmware behaved.

Press “Open door” icon, the GSC3570 will open door directly and **NO SIP CALL** will be established.

Depending on how many doors controlled, if one door configured, the door will open directly; if two doors configured, another screen will pop up to allow user to choose which door to open, as shown below:
### Monitor

<table>
<thead>
<tr>
<th>Door system</th>
<th>Front_Door</th>
<th>Back_Door</th>
<th>GDS3710</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP camera</td>
<td>[Image]</td>
<td>[Image]</td>
<td>[Image]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GDS3710</th>
<th>GDS3705</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Image]</td>
<td>![Image]</td>
</tr>
</tbody>
</table>

**GDS Action: open door success**
SCREEN SNAPSHOT DURING RTSP STREAMING OR SIP VIDEO CALL

This feature do not need any configuration and enabled by default, but SD card is required for this feature to work correctly.

➢ RTSP Streaming:

During RTSP steaming, in the middle of the screen, a virtual “Snapshot” button will appear. Press that button will capture current screen and the snapshot will be saved in the SD. The file path will display in the screen then disappear.
➢ SIP Video Call:

During SIP video call, press the “More” icon will pop up another screen, the “Screenshot” icon will be displayed. Press the “Screenshot” button will capture current snapshot and stored it in the SD card.

The file path will display in the screen then disappear after a while. Press the “File” icon from GSC3570 idle screen, select “videoshot” file folder, the snapshots will be stored based on folder using “date” when snapshot taken. Select related folder will see the snapshots stored.
H.265 RTSP SUPPORT WITH MAXIMUM 720P 3MBPS@30FPS

- **Web Configuration**

This feature is implemented for some customers who want to enjoy H.265 high quality video with limited bandwidth and record live video via 3rd party NVR, or some users who like to view H.265 video stream in GSC3570 screen.

- **GSC361X or GDS3710 or IP camera configuration:**

  ![Video Settings](image-url)

  - **Stream 1**
    - Preferred Video Codec: H.265
    - Profile: HEVC Main
    - Resolution: 1280*720(16:9)
    - Bit Rate(kbps): 4096
    - Frame Rate(fps): 30
    - Bit Rate Control: VBR (Variable Bit Rate)
    - Image Quality: Very High
    - I-Frame Interval: 80

- **The GSC3570 configuration:**

  ![IPC Configuration](image-url)
• Functionality

This feature is implemented to meet request of customers from field.

Following are need to be remembered when configure and use this feature:

1) If using 3\textsuperscript{rd} party NVR to record H.265 video, more than 720p or more than 4Mbps video bitrate is required, the IP Camera or the GDS3710 side must use 1\textsuperscript{st} or primary stream. Because 2\textsuperscript{nd} stream the maximum video bitrate is 3Mbps.

2) GSC3570 can ONLY display and decoding 720p resolution.

3) If H.265 is used as 2\textsuperscript{nd} stream for RTSP, then SIP Video Call will not display video because H.265 is NOT supported by SIP Video Call device.

4) Suggested to use 1\textsuperscript{st} or primary stream for H.265 (recording) and 2\textsuperscript{nd} stream for H.264, so both H.265 recording and SIP Video Call can work at the same configuration.

For detailed information, please refer to User Manual and Resource Center:

• GSC3570 User Manual:

• GSC3570 Resource Center:
  http://www.grandstream.com/support/resources/?title=GSC3570
FIRMWARE VERSION 1.0.5.4

PRODUCT NAME
GSC3570 (Boot: 1.0.5.4; Core: 1.0.5.4; Base: 1.0.5.4; Prog: 1.0.5.4; Locale: 1.0.5.4)

HW Supported: 1.0A, 1.1A, 1.2A, 1.3A, 1.4A

DATE
11/04/2020

SUMMARY OF UPDATE
This is a major milestone release, with lots of important new feature and function implemented, in addition to some bug fixes.

Factory Reset Required:
- Factory Reset the device after upgrade to this version to initialize all parameters correctly.
- SD Card must be formatted via touch screen UI before using for storage.

ENHANCEMENT
- Added switching to RTSP Monitor during an active SIP call.
- Added Tooltip specified file requirement for uploading customized wallpaper.
- Added Secure Open Door by using GSC3570 (Alarm_Output Interface) controlling strike/lock from inside building via peering with GDS3710 (FW1.0.7.19 above required) or GDS3705 (FW1.0.1.13 above required) at outside over network.
- Added RTSP supporting.
- Added FTP server support so GDS3710 and IP Cameras can upload snapshots and save to SD card.
- Added VLAN functions in “General networking settings” at LCD Settings UI.
- Added support to customize the main idle screen.
- Enhanced system performance and stability.
- Added open door softkey support for 3rd party door systems.
- Added Czech language support in touch UI.
**BUG FIX**

- Fixed selecting Traditional Chinese not displayed in LCD.
- Fixed failed to delete Contacts in batch.
- Fixed searching Contact on LCD requiring multiple taps to call out or view Contact details.
- Fixed device stop sending RTP after receiving 183 SIP message.
- Fixed delay alarm confirmation prompt will not pop up when device in screensaver mode.
- Fixed displaying long number or name abnormal.
- Fixed cannot automatically switch to another good known Wi-Fi if current Wi-Fi failed.
- Fixed Download/Upload Configuration; Export/Restore Backup Package are invalid.
- Fixed long time video call may fail.
- Fixed maximum brightness is not bright enough and screen flicking during adjustment.
- Changed "São Paulo" time zone to UTC-3
- Fixed alarm call not get through (e.g.: call timeout or wrong number), the next following alarm call will not play siren sound when call established.
- Fixed deleting Contact in LCD UI will not have prompt and fail to delete the record.
- Fixed device cannot scan SSID when disable/enable the Wi-Fi in WebUI.
- Fixed cannot fully display SSID with special characters.
- Fixed system status displaying abnormal for user space.
NEW FEATURES OVERVIEW

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

RTSP SUPPORT

- **Web Configuration**

This option can be found under device web UI → Settings → IPC:

![Web Configuration Screenshot]

- **Touch Configuration**

This can also be configured via touch UI by press the “Monitor” icon from the touch screen:

![Touch Configuration Screenshot]
• **Functionality**

This feature enhancement will allow users to monitor the IPCs using RTSP stream, in addition to previous SIP video call mode. So there are now two monitor modes, the RTSP streaming mode in addition to previous SIP call mode.

The RTSP mode allows users to view 3rd party IP camera RTSP stream, if the streaming can be decoded by GSC3570, to save customer’s investment.

Due to GSC3570 7” capacitive touch screen only has 1024x600 resolution and limited CPU resource, it can only decode video stream of **720p (HD) with bit rate less than 1Mbps**, this means 2nd stream for most of the Grandstream IP cameras or GDS3710. If video stream over this limit, GSC3570 will pop up error message. This means GSC3570 cannot decode 1080p (FHD) or 1st stream of most of the Grandstream IP cameras and cannot display it.

**Here is the webUI configuration sample:** *(Recommended for input convenience)*

![](image)

**NOTE:**

- If the IP camera support anonymous RTSP, username and password can leave blank, otherwise user ID and password must be configured based on IP Camera.
- The RTSP can only decoding 2nd stream or max. resolution 720p 1M bit rate (due to MIPs limitation, and touch panel max resolution is 1024x600).
- Now there are two ways to monitor the IP cameras: SIP extensions Call (UCM/Proxy) or IP peering (No Proxy/UCM); RTSP Streaming. The RTSP can be configured with User ID (secure) or anonymous (convenient if in same LAN) as long as the IP camera allows.
- The GSC3570 can view RTSP video streaming of IP camera configured “One by One” (multiple RTSP streams simultaneously NOT supported due to the MIPs limitation).
Here is the Touch UI configuration sample:

Press the “Monitor” icon will get into below UI. Select “IP camera” tab:

- Press  icon to get into the page of adding new IP camera by input related information.
- Press  icon to edit existing IP camera information.
- Press  icon to get into the UI page to edit the information of selected IP camera.
- Press 🎥 icon to view the live RTSP video stream of the selected IP camera.

- Press 🔄 icon to update the image icon of the selected IP camera via the snapshot of the moment when icon pressed. The image is used to remind the scene where IP camera monitored.
• Application Scene:
SWITCH TO RTSP VIDEO MONITOR IN MIDDLE OF CALL

- Functionality

This new feature is designed and implemented based on feedback from customers. It can help to increase safety but keep convenience, used in public scene like School/Campus, Dorm/Hallway, Hospital, Library, Gym, Theater, Club, etc.

Basically in open/public space where there is a GSC3510 Audio Intercom or IP phone (or GDS3705), User (e.g.: student) pressing (emergency) button or make a call to GSC3570 (e.g.: security guard), if same location has installed IP camera around, once call established and in session, the GSC3570 will display RTSP icon on the right side of touch screen UI, pressing RTSP icon and select the related IP Camera, the call will automatically ONHOLD, the person at GSC3570 side can see the RTSP live video and know what is happening, then switch back to continue talking to the caller, or open door if this is access control without built-in camera (e.g.: GDS3705).

The caller side can be: GSC3510 (button call), IP phone (video or audio) or GDS3705/GDS3710 (access control).

This feature needs working SIP call and RTSP stream preconfigured. This feature will work with GDS3705 or any Grandstream SIP phones and Grandstream IP cameras or even some 3rd party IP cameras.

Below are example usage scene diagram:
Below are the GSC3570 touch panel UI screenshots:

- Accepted Incoming Call (Press the “RTSP” icon at right side:}

8608

John IPC01(8606)

Talking...

- Mute
- Keypad
- Hold
- More
- 00:00:09
- Select the IP Camera to view the live RTSP video:

![IP camera interface]

- Press the touch panel screen on up left corner the “<” icon to resume the call:

![Resume call interface]
SECURE OPEN DOOR PEERING WITH GDS3710/GDS3705

This new feature requires GSC3570 and GDS3710/GDS3705 paired together to function. With GDS3710 or GDS3705 installed outside, the GSC3570 is installed inside, the strike or lock is wired directly to the Alarm_Out interface of GSC3570 to control the door from inside, therefore more secure compared to the strike wired directly to GDS3710/GDS3705 at outside. Below is the application scene illustration:

**GSC3570 Open Door from Inside**

![Diagram of GSC3570 Open Door from Inside]

**NOTE:**

- GDS3710 FW1.0.7.19 or above, GDS3705 FW1.0.1.13 or above, are required to work with GSC3570.
- Only one door can be controlled due to GSC3570 only has one Relay Control circuit.
- If multiple doors need to be controlled by GSC3570, SIP call is required and door/strike/relay should be controlled by related GDS37xx directly. This is existing feature.

For the GSC3570 and GDS37xx pairing, use SIP extension only (Cloud or UCM); IP only (No SIP proxy or UCM); or Mixed configuration (SIP extension and fallback to IP if Proxy failed) all works.

Although it works (local or remotely) via using SIP extension over Internet by UCM/Proxy, It is recommended to use static IP if the GSC3570 (inside) and GDS37xx (outside) are in the same location at the same LAN, just for fast response and reliability, in case Internet/UCM is down or network outage.
• **Web Configuration**

Here are some sample configuration screenshots of GDS37xx and GSC3570 pairing to secure open door:

• **GDS3710:**

![GDS3710 Configuration Screenshot]

- **GSC3570:**

  See below the screenshot of GSC3570 configuration. The doorbell call from different GDS37xx, it will have virtual “One Button Open Door” icon displayed in “Preview” (if early media supported) or when call established. Press the virtual button at GSC3570 screen will allow remotely open the door where the strike is controlled by the related GDS37xx.

![GSC3570 Configuration Screenshot]

There is no door limitation for such usage but only ONE DOOR can be opened at one time. It is just a typical SIP call open door application.
In addition to the above “External Service”, the “Digital Output” also need to be configured:

Also if the solution or system integration is using static IP address without SIP Proxy, all the devices involved (GDS/GSC/IP Phone) should choose “NAT Traversal” to “No” and should NOT “Use Random Port”, otherwise it will cause ghost call (SIP signaling working but NO media).

The IP phone or GSC3570 can use any empty account, meaning while default Account 1 registered to UCM/Proxy, the blank Account2 can be used to IP call. (but need to select this account to be “Active”).
When this feature function and door opened, the GSC3570 will play a long “Beep” notifying the successful relay operation to open door (a relay click sound can be heard), and display an “Open Door” icon at top right corner of the touch screen. The icon will disappear when “Unlock holding time” expired.

At the same time, the GDS37xx side will also play a long “Beep” notifying successful open door.

When configured correctly, the GSC3570 Secure Open Door will function to all GDS37xx open door mode: RFID card, Local PIN, Remote PIN (SIP Call or DTMF Open Door).

- **Functionality**

This feature is implemented based on customers with open door security concern.

Now for GDS37xx, three relay control mode can be used by customers or system integrators:

1. Local Relay Control
2. 3rd party Web relay Control
3. GSC3570 Relay Control

This control protocol between GSC3570 and GDS37xx is encrypted, to secure data transmitted over the network, allowing GDS37xx accept input and verify the information, then instruct GSC3570 to control the relay and open door.
FTP SERVER AND SD CARD SUPPORT

The GSC3570 now has built-in FTP server (like all other Grandstream GXV3xxx video IP phone), and the SD card inserted into the SD card slot can now be used to store snapshots triggered by motion detection alarm of IP cameras, or snapshots of doorbell call or open door event from GDS3710.

The maximum SD/TF card supported is 256G. The SD card must be formatted by GSC3570 before usage.

- **Functionality**

The FTP and SD card function only can be configured via touch screen.

Press “Setting” on the touch screen, get into the “Settings” screen, then touch the “FTP server settings” to configure the FTP server parameters, as shown in below screenshots:

By default the FTP Server is disabled. Touch to “Enable” the FTP, the configure the Port used, create username and Password.

The default port is TCP 21, but customer can configure to different port based on network condition.

If Username and Password are leaving blank as default (not configured), then this means they are not required and “anonymous FTP” used. This is not secure but convenient in some LAN integration.
Press “Setting” on the touch screen, get into the “Settings” screen, then touch the “SD card” to get into SD card operation, as shown in below screenshots:

Thouch the “Format” to perform SD card initialization and mount. All the SD card has to be formatted by GSC3570 before usage.
Once the FTP Server enabled, and the SD card initialized (formatted) and mounted successfully, the FTP icon and SD card icon will be displayed at the top right corner of the “Home” screen like below:

To check the snapshots in the SD card, touch the “Files” icon, the snapshots will be stored into related file foders according to following rules:

- For GSC361x IP Camera and GDS3610, snapshots will put in root folder with name based on “DeviceModel_Last6MAC”, which identify the different IP Cameras.
- Inside the device name folder, the snapshots will be store by the file folder with “Date” as folder name. All the snapshots in that date will be stored in that folder.
• **Application Scene:**

![Application Scene Diagram]

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**Note:**

- Images and diagrams are not rendered in this text format. The application scene diagram is omitted in this description.
TOOLTIP FOR UPLOADING CUSTOMIZED WALLPAPER

• **Web Configuration**

This option can be found under device web UI → Settings → LCD Display:

![Web Configuration Screenshot]

• **Functionality**

This feature is adding to advise customer what kind of customized wallpaper file can be uploaded into GSC3570.

The file must be JPEG or PND format, with resolution 1024 x 600, and maximum size 500KB.
CUSTOMIZE THE MAIN IDLE SCREEN

This option can be configured via touch screen UI.

Press “Settings” in the “Home” screen, then select “Desktop settings” to adjust the related feature or function icons to be displayed at “Home” page or Desktop:

Select “-” or “+” from touch screen to do the operation.

- **Functionality**

  This feature is implemented based on request from customers in field, to allow user to customize the desktop icons in the “Home” screen.
OPEN DOOR SOFTKEY FOR 3RD PARTY DOOR SYSTEM

- **Web Configuration**

This option can be found under device web UI → Settings → External Service:

![Image of web configuration interface]

- **Functionality**

This feature is implemented to meet request of customers from field.

By select and configure the supported related 3rd party door access system here, when GSC3570 is in SIP call with DTMF open door operation, the "Soft Button" preprogrammed will appear in the GSC3570 touch screen. User will be able to press the soft key to sending the open door PIN to related 3rd party door access control system to open door.

This is enhancement to help system integrators and customers to integrate GSC3570 with 3rd party Door Access Control system to operate open door remotely.
VLAN CONFIGURATION VIA LCD SETTING

In addition to the webUI VLAN configuration under “Network → Advanced Settings”, in the LCD touch screen also added this configuration via touch screen UI.

Press “Settings” in the “Home” screen, then select “General network settings” to adjust the related VLAN parameters from the touch screen:

- **Functionality**
  
  This feature is implemented based on request for customers in field, to help system administrator or customers to configure and adjust the VLAN parameters conveniently from touch screen.
ADDED CZECH LANGUAGE SUPPORT IN LCD DISPLAY

Press “Settings” in the “Home” screen, then select “Language” icon to choose required language to be displayed in the touch screen. Default is “Auto”, automatically displaying the language based on location.
For detailed information, please refer to User Manual and Resource Center:

- **GSC3570 User Manual:**

- **GSC3570 Resource Center:**
  [http://www.grandstream.com/support/resources/?title=GSC3570](http://www.grandstream.com/support/resources/?title=GSC3570)
FIRMWARE VERSION 1.0.3.1

PRODUCT NAME
GSC3570 (HW Supported: 1.0A, 1.1A, 1.2A, 1.3A, 1.4A)

DATE
04/29/2020

SUMMARY OF UPDATE
This is the initial version of public release.