CyberData
The IP Endpoint Company

Leap Telecom Configuration Guide: SIP Enabled Call Buttons

Document Part # 931954A

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Revision Information

8/26/2022 – Initial Release

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1.0 Supported CyberData Products

This section describes the products used for interoperability testing with Leap Telecom.

Table 1-1: Supported CyberData Products

EQUIPMENT	MODEL or PART NUMBER	FIRMWARE VERSION
CYBERDATA SIP CALL BUTTON	011049	20.4.1 or later
CYBERDATA SIP OUTDOOR CALL BUTTON	011491	20.4.1 or later

2.0 Before You Start

Network Advisories

Leap Telecom uses a Fully Qualified Domain Name (FQDN) for the SIP server. The CyberData call button needs to perform a DNS query to resolve the IP address of Leap's Instance Name.

In addition, be sure to verify the following ports are available for the button to use:

- UDP 5060 (SIP)
  OR
- TCP 5060 (SIP)
- UDP 10500 (RTP)

The button will need to traverse the public internet in order to operate with Leap Telecom in the cloud.

The button's paging extension uses SIP port 5060 to send and receive SIP messages.

SIP ports 5060 and RTP port 10500 are the default values on all noted firmware levels. Alternatively, SIP ports are configurable on the **SIP** page of the web interface. The RTP port setting on the **SIP** page is used for both extensions.

Product Documentation and Utilities

Before you start, download the Operation and Quick Start guides from the button's product webpage:
SIP Call Button:
https://www.cyberdata.net/collections/sip/products/011049

SIP Outdoor Call Button:
https://www.cyberdata.net/collections/sip/products/011491

The CyberData Discovery Utility can be used to locate CyberData devices on your network. You may download it from the following web address:
https://www.cyberdata.net/pages/discovery

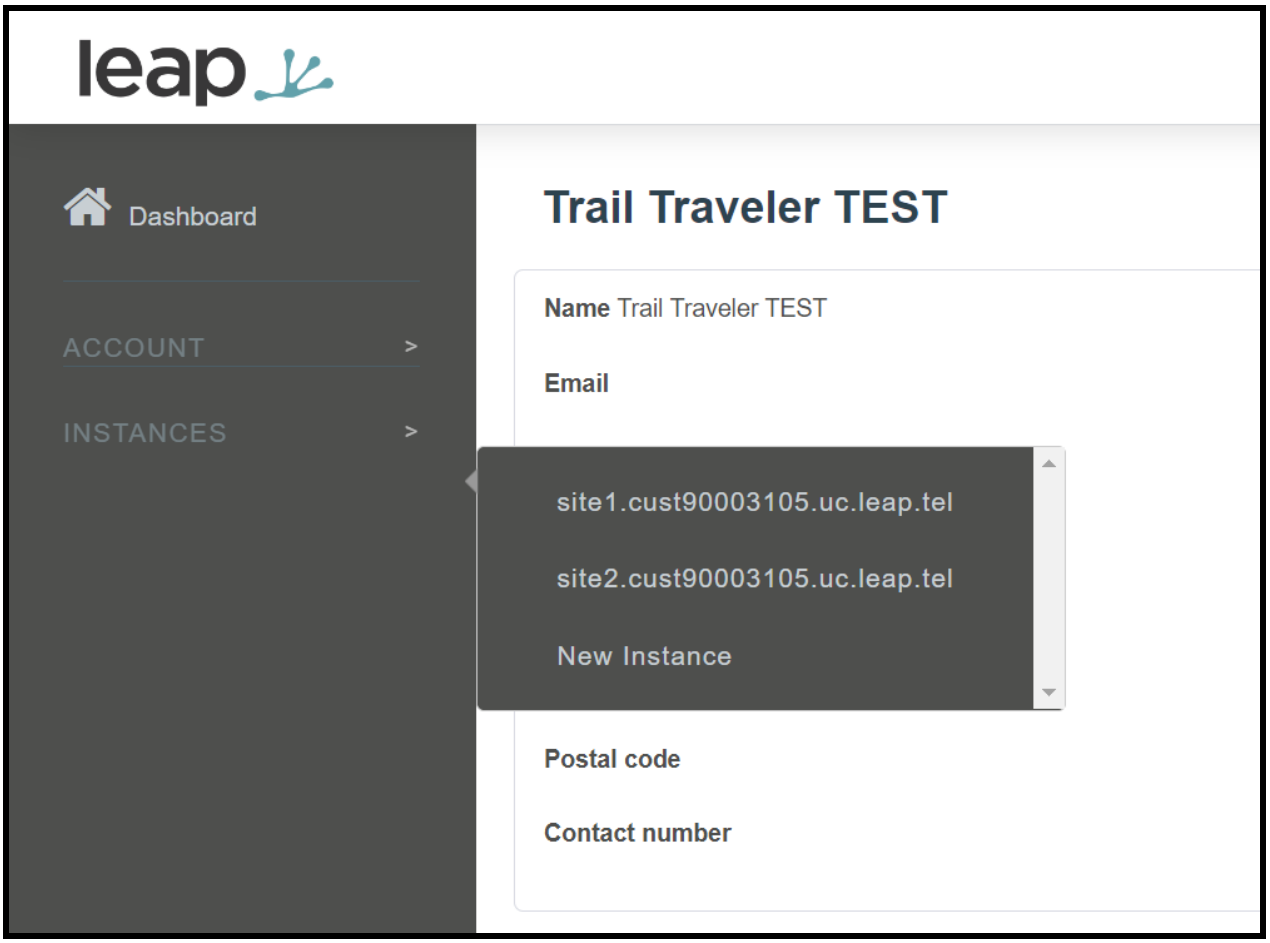
***Note**: DHCP addressing mode is enabled on default on all noted firmware levels.*

3.0 Setting up a Device in the Leap Tel System

This section outlines how to create a device in the Leap Tel system.

1. Login to the Leap system
2. Mouse over instances and select the site/instance where the device will be used.

Figure 3-1: Instance Selection

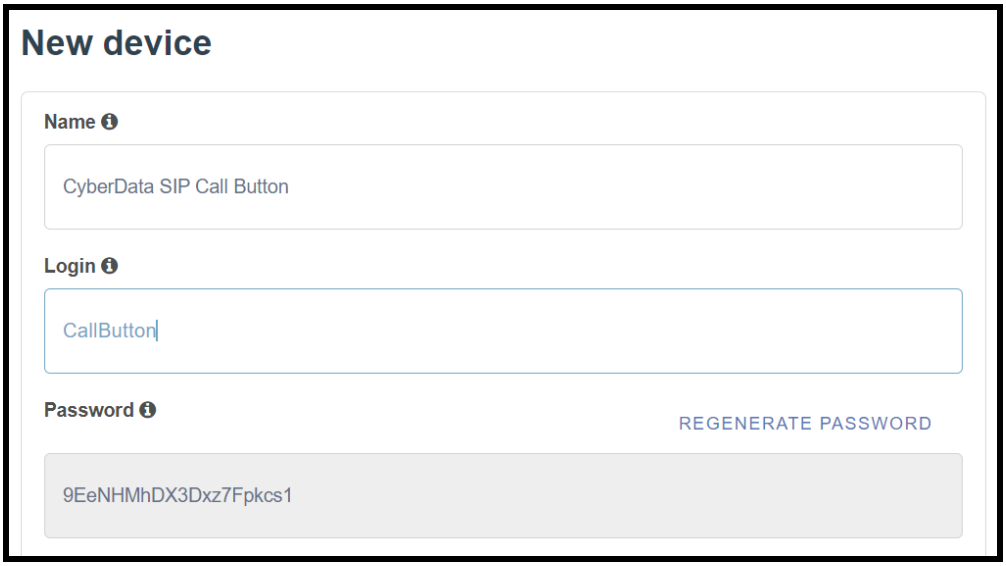


3. From the site page select **Devices**, then press the **+** button to create a new device.

Figure 3-2: Workspaces Page

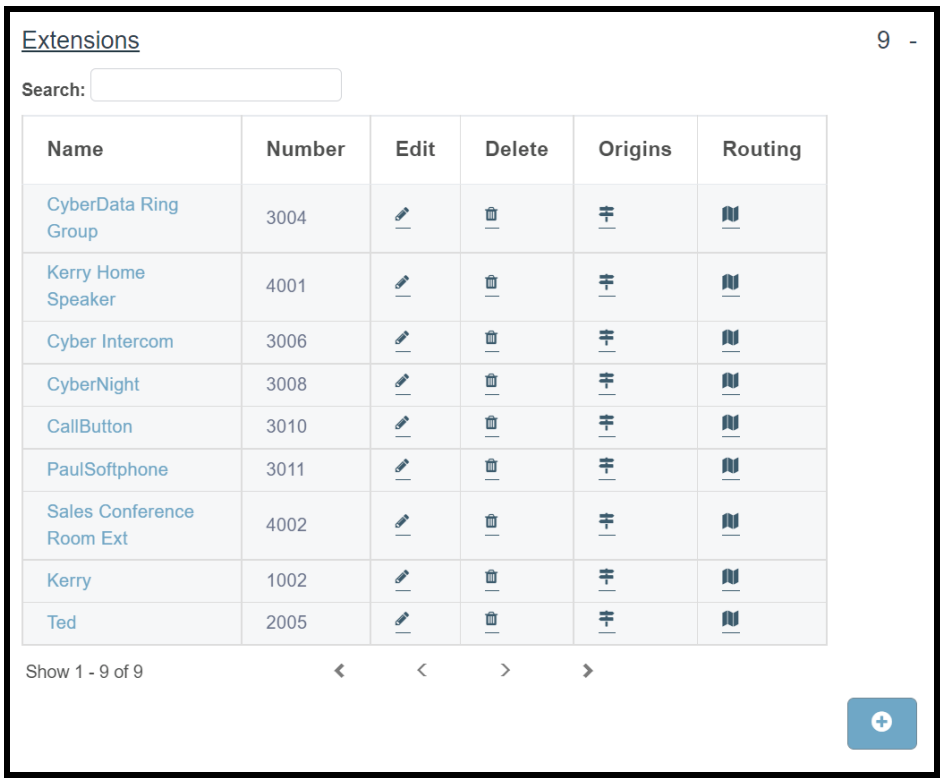
4. Set the **Name** of the device, being descriptive can help for device management in the future.
5. Set the **Login** field as desired, CyberData recommends not using spaces, hyphens, or underscores.
6. Press **Save** at the bottom of the page.

Figure 3-3: Add a Device



7. After pressing save the page will refresh, click on **Extensions**.
8. In the **Extensions** section press the + to create a new extension.

Figure 3-4: Pick a device



9. In the New extension window set a **Name** for the extension. CyberData recommends having the name correlate to the device that will use the extension.
10. Set the **Number** as desired.
11. Set the **Destination** to the **Name** of the device set in step 4.
12. Press **Save.**

Figure 3-5: New Extension Creation

Configuration on the Leap Tel side is now complete and the CyberData device is ready to be configured. Values set on the Device tab are required for registration, CyberData recommends opening up the Device created in steps 3 - 6 for ease of copy and pasting.

4.0 Setting up a CyberData Call Button

This section outlines the required sections for the CyberData device and how the credentials supplied from Leap correlate to the CyberData settings.

Table 4-1: SIP Credential Explanation

Leap Credential	CyberData Setting
Instance	Primary SIP Server
Device Login	Primary SIP User ID
Device Login	Primary SIP Auth ID
Device Password	Primary SIP Auth Password

CyberData's default login credentials are:
Username: admin
Password: admin

1. Log into the web interface of the CyberData device.

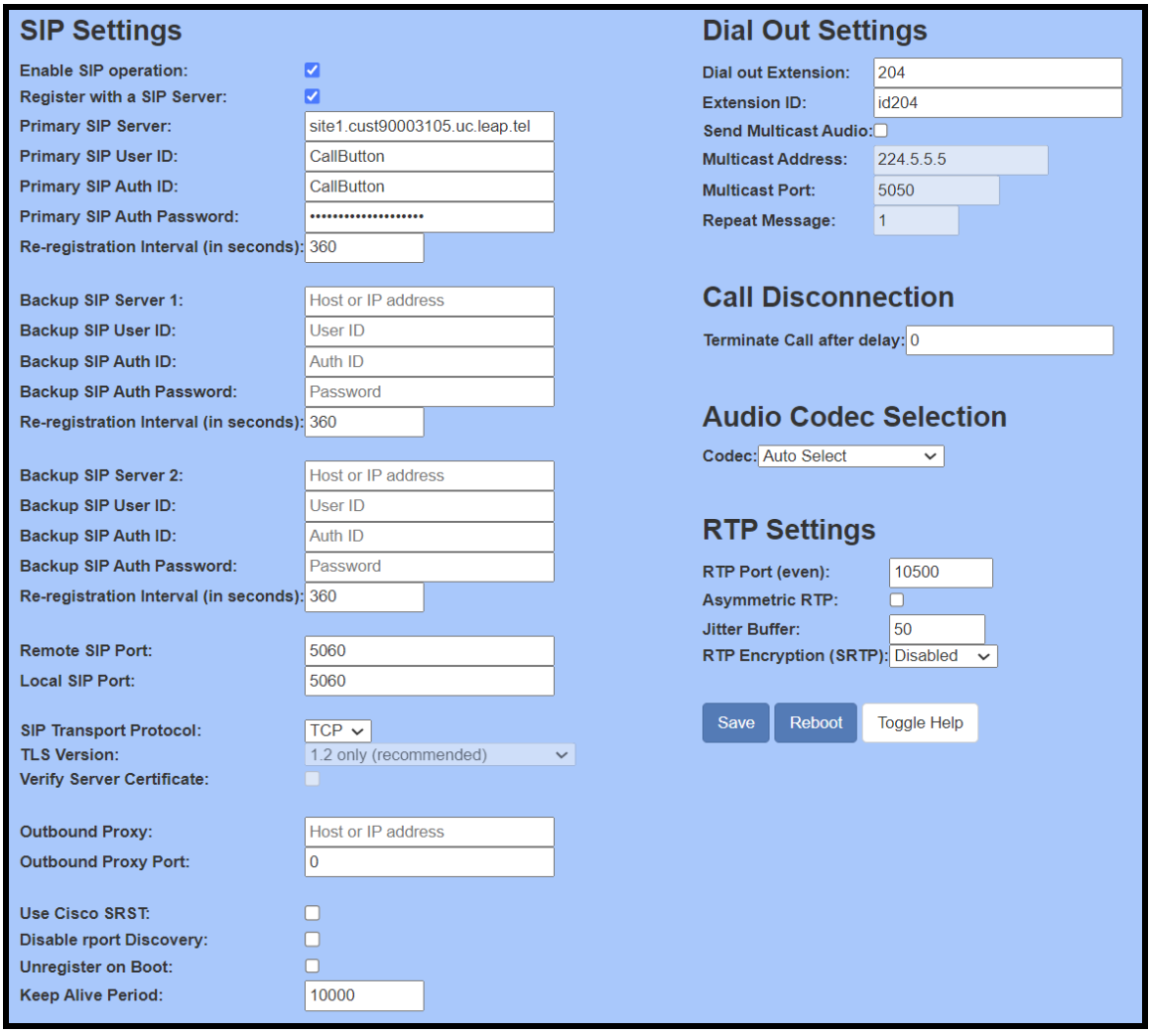
Figure 4-1: Home Tab

2. Navigate to the SIP tab.
3. Set the **Primary SIP Server** field to the FQDN of the Instance.
4. Set the **Primary SIP User ID** to the Device Login set in step 3-5.
5. Set the **Primary SIP Auth ID** to the Device Login set in step 3-5.
6. Set the **Primary SIP Auth Password** to the Device Password.

Note: *Leap Tel supports both UDP and TCP for SIP Transport. Please use either of the transport protocols, during testing CyberData found that TCP preforms best.*

7. Save and Reboot.

Figure 4-2: SIP Tab



If the credentials have been entered correctly the device should now be registered with Leap. This can be verified on the home tab of the web interface or on the Leap Telecom site.

Figure 4-3: Home Tab – Registered

5.0 Using the CyberData Call Button in a Leap system.

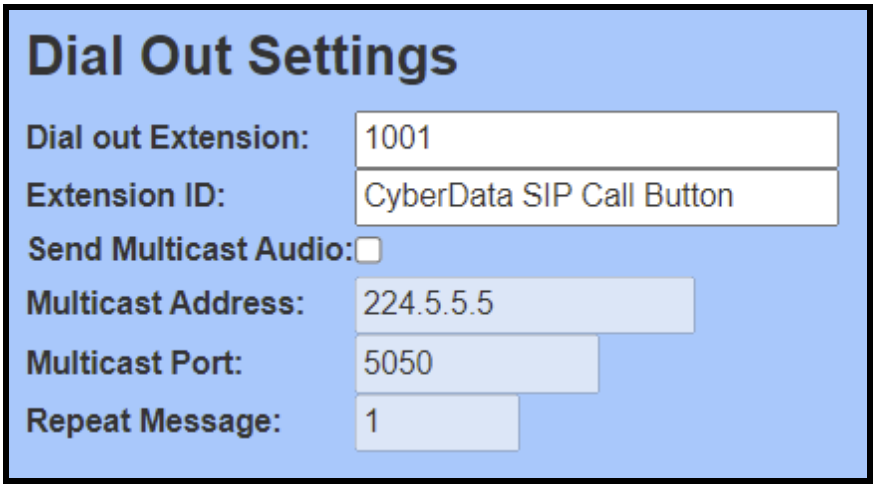
CyberData Call Buttons are used for notification. When the button is depressed the call button can call a predetermined number and play a preloaded audiofile. It can also send multicast across the local area network simultaneously.

5.1 Setting the Dialout Extension

Once the button is registered with Leap, the "Dial out Extension" will need to be set for the device to call a number when the call button has been pressed. This number can be either a direct extension, hunt group, call queue, or a direct phone number.

1. After Logging into the device go to the **SIP** Tab.
2. On the SIP Tab set the Dial out Extension to the address you want the device to call.
3. The Extension ID of the call button is what should appear as the caller ID to the Recipient.

Figure 5-1: Set the Dial out Extension



5.2 Creating up an Audiofile

CyberData devices require audio files to be in a specific format. CyberData recommends using a free tool like Audacity to convert an audio file into the specific required format.

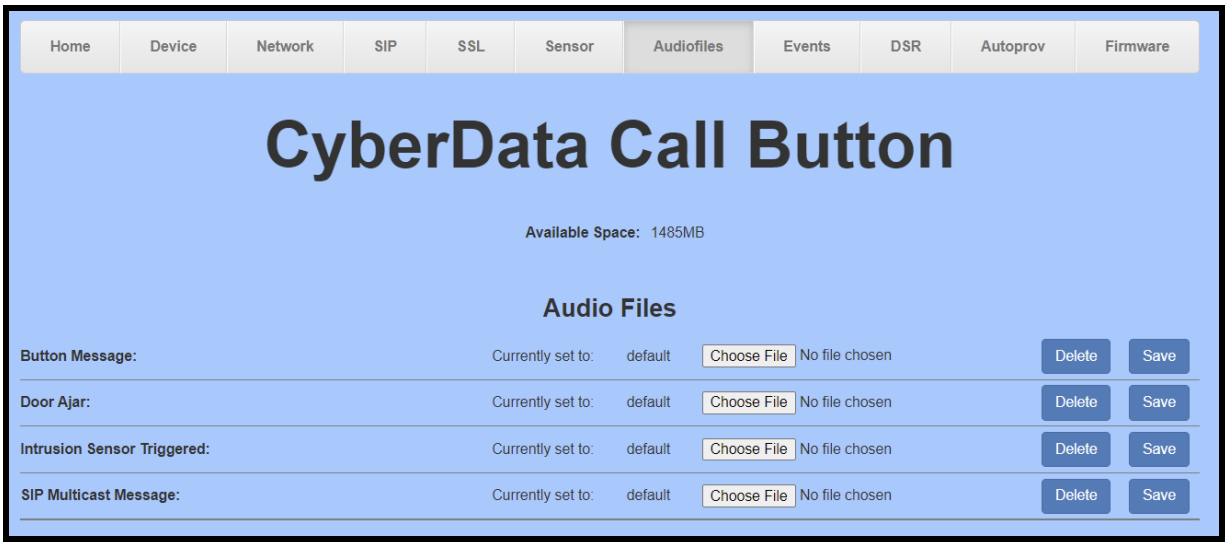
- RIFF (little-endian) data,
- WAVE audio, Microsoft PCM
- 16 bit, mono 8000 Hz

5.2.1 Uploading the Audiofile

Once the audiofile is created it must then be uploaded to the CyberData device.

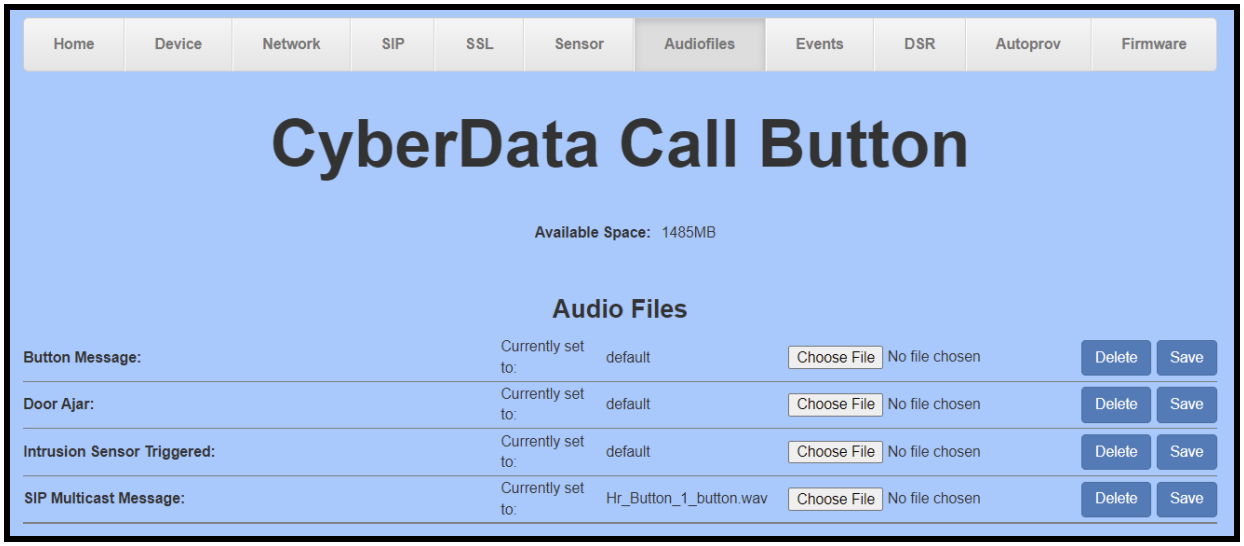
1. Navigate to the **Audiofiles** tab.

Figure 5-2: Audiofiles Tab



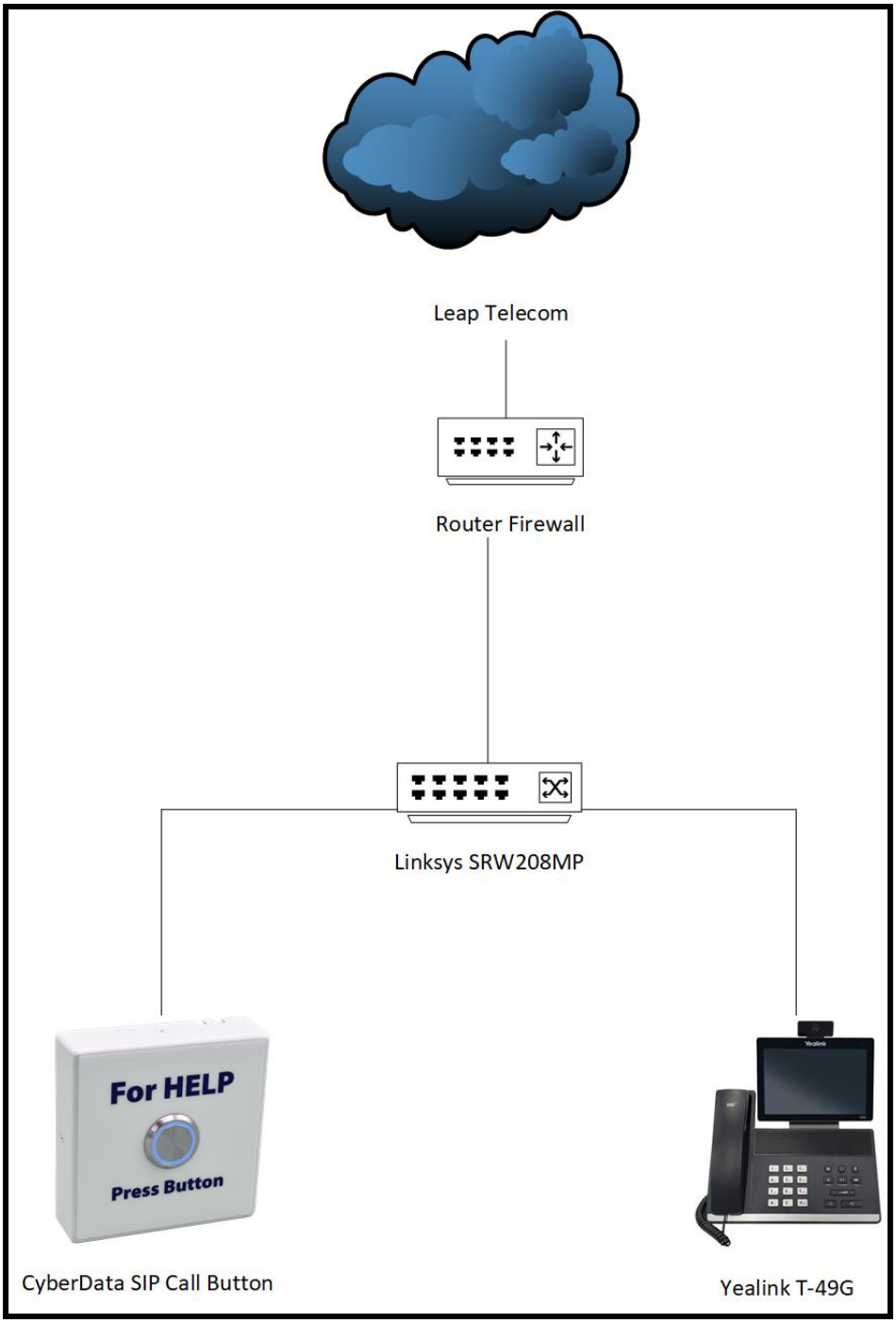
1. Upload the audiofile to one of the 9 stored message options by pressing **Choose File**.
2. Select the desired audiofile and press **open**.
3. Click **Save** to upload the audiofile.

Figure 5-3: Audiofile Uploaded



6.0 Setup Diagram

Figure 6-1: Interoperability Test Infrastructure



7.0 Contact CyberData Corporation

Sales

For sales-related questions, please visit our Contact CyberData Sales web page for more information.

Technical Support

For CyberData Technical Support, please submit a Contact CyberData VoIP Technical Support form on our website.

The CyberData VoIP Technical Support Contact form initiates a troubleshooting ticket which CyberData uses for quality assurance purposes.

Additionally, the Contact VoIP Tech Support form tells us which phone system you are using, the make and model of the network switch, and other essential troubleshooting information we need to efficiently assist with a resolution. Please also include as much detail as possible in the Describe Problem section of the form. Your installation is extremely important to us.

Documentation Feedback

We realize changes to the software or hardware of the Leap Telecom solution may render this document obsolete. We welcome and encourage documentation feedback to ensure continued applicability.