



The IP Endpoint Company



Wildix Configuration Guide: SIP Call Button

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CyberData Corporation
3 Justin Court
Monterey, CA 93940
(831) 373-2601

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Revision Information

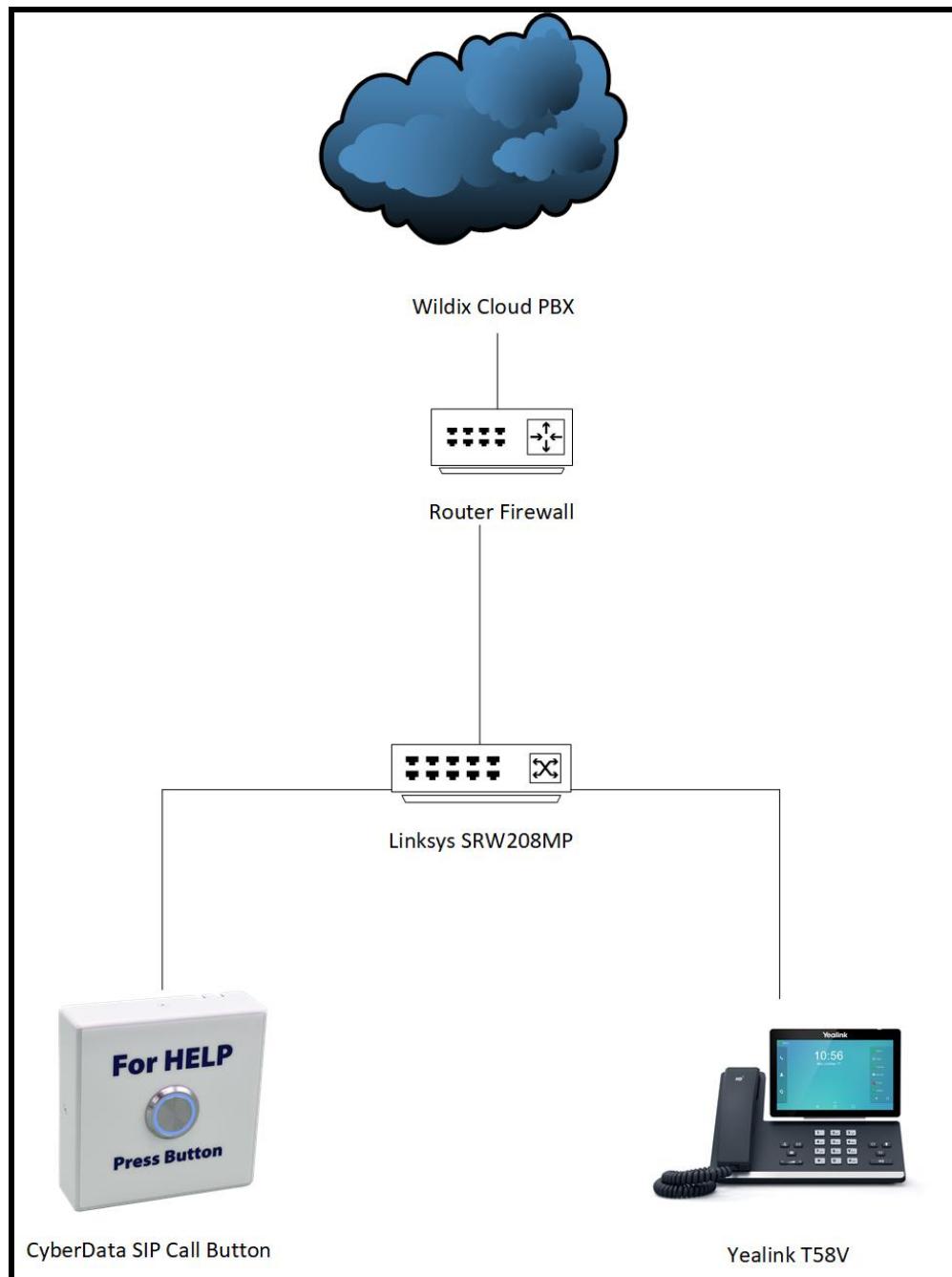
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1.0 Setup Diagram

Figure 1-1: Interoperability Test Infrastructure



2.0 Test Setup Equipment

This section describes the products used for interoperability testing with Wildix.

Table 2-1: Setup Equipment

EQUIPMENT	MODEL or PART NUMBER	FIRMWARE VERSION
CYBERDATA SIP CALL BUTTON	011049	20.3.0
CYBERDATA OUTDOOR SIP CALL BUTTON	011491	20.3.0
YEALINK	T58A	58.83.3.6
LINKSYS SWITCH	SRW208MP	---

3.0 Before You Start

This configuration guide documents the integration process of a CyberData SIP Call Button.

Network Advisories

Wildix uses a Fully Qualified Domain Name (FQDN) for the SIP server address. The CyberData SIP Call Button needs to perform a DNS A query to resolve the IP address of Wildix's SIP Server FQDN. It is necessary to ensure the configured DNS server(s) have an A record for the SIP Server address.

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

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

The Call Button will need to traverse the public internet in order to operate with Wildix in the cloud.

The button's paging extension uses SIP port 5060 to receive SIP messages. The paging extension will send SIP messages to port 5060, the port used by Wildix's SIP Server.

SIP ports 5060 and RTP port 10500 are the default values on all noted firmware levels.

Alternatively, SIP ports for the paging extension are configurable on the **SIP** page of the web interface.

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.

Product Documentation and Utilities

Before you start, download the Operation and Quick Start guides from the button's product webpage:

CyberData SIP Call Button ([011049](#))

https://files.cyberdata.net/assets/011049/011049_931551C_SIP_Call_Button_Operations_Guide.pdf

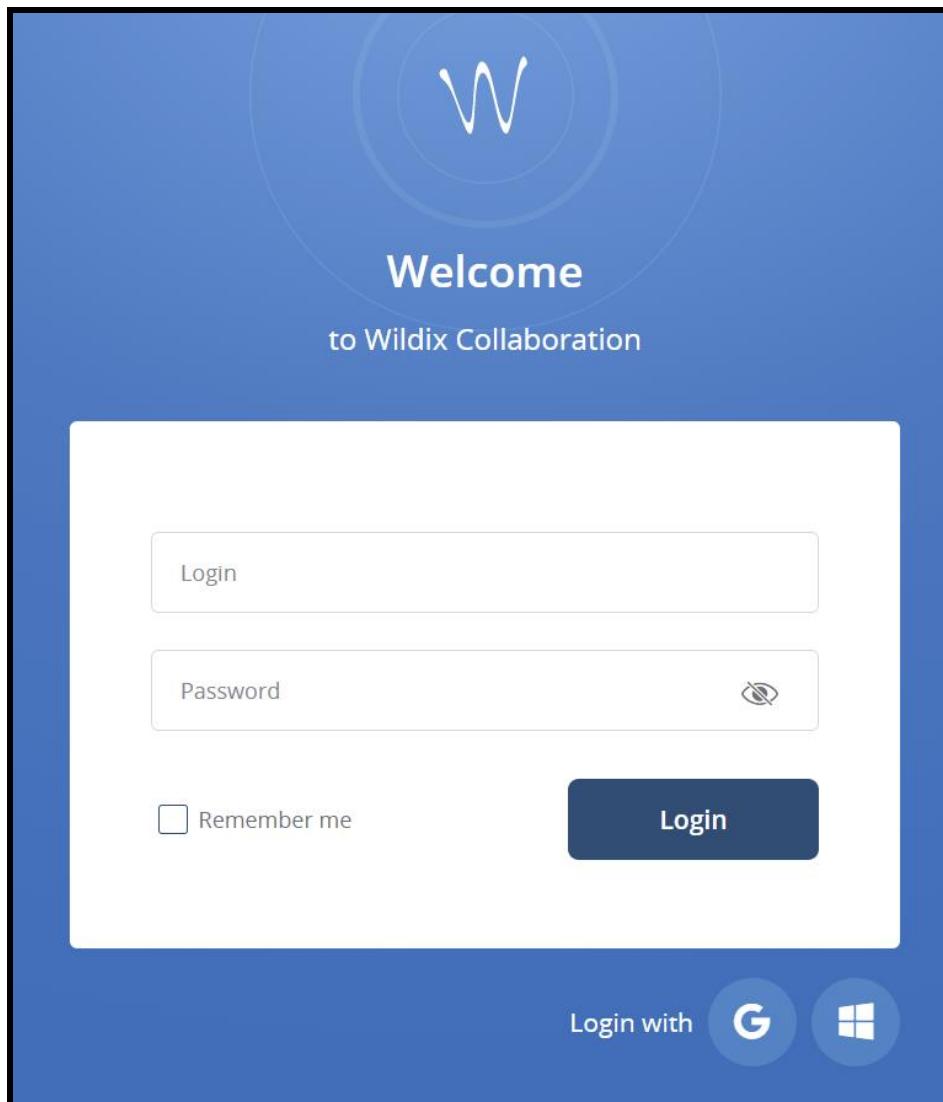
CyberData SIP Outdoor SIP Call Button ([011491](#))

https://files.cyberdata.net/assets/011491/011491_931656C_SIP_Outdoor_Call_Button_Operations_Guide.pdf

4.0 Configuration Procedure: Extension creation

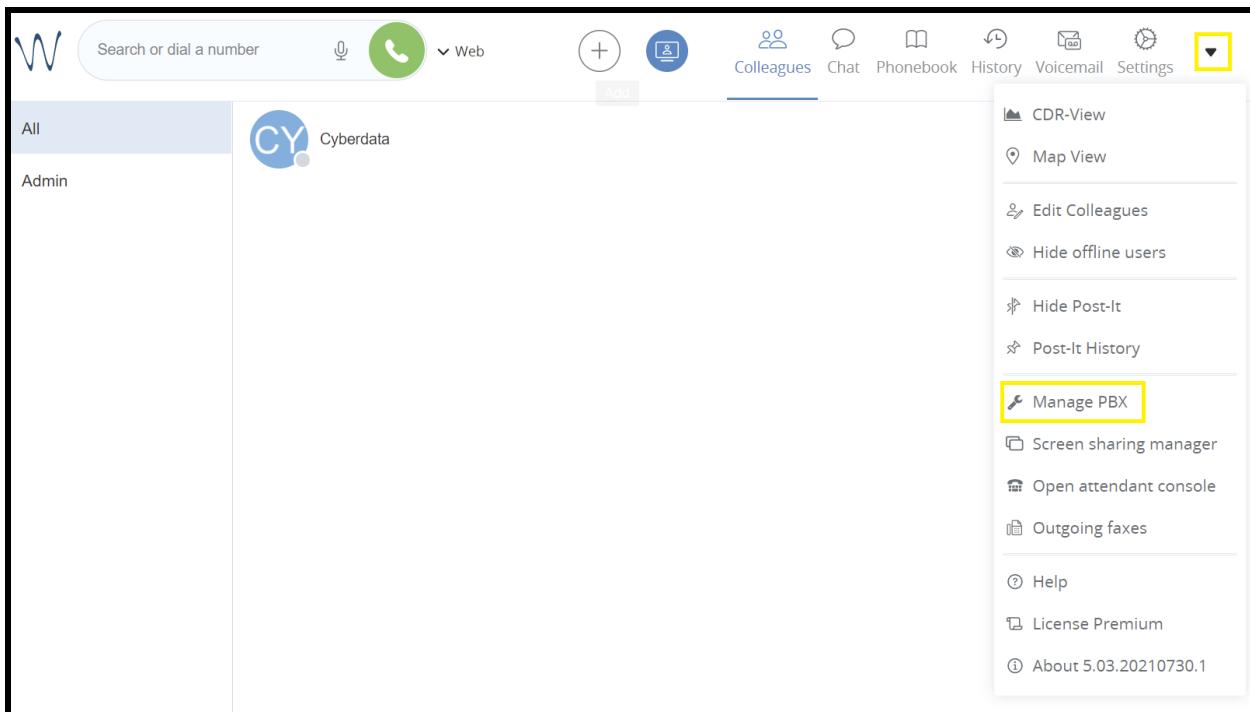
1. Log into Wildix.

Figure 4-1: Log into Wildix



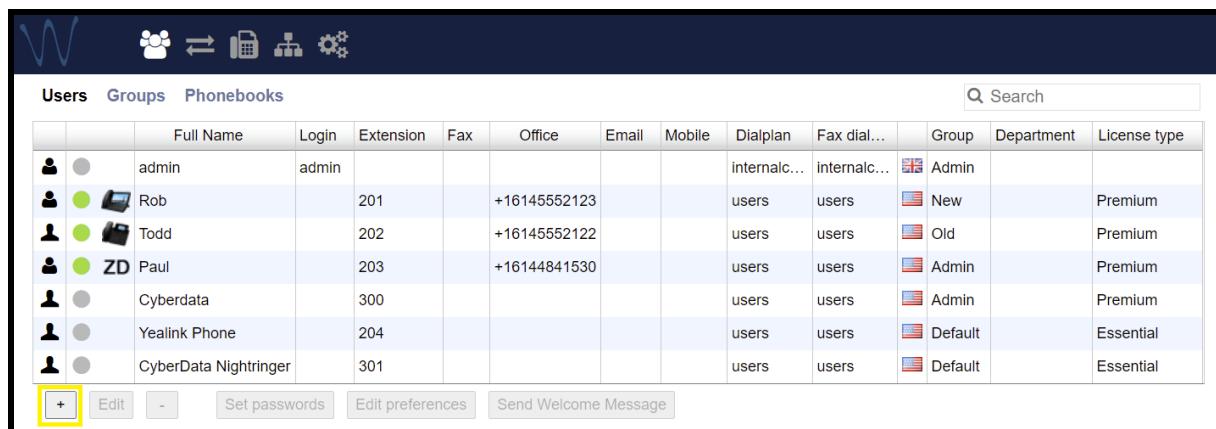
2. From the landing page select the **Other** down arrow button and pick **Manage PBX..**

Figure 4-2: Manage PBX page



- On the Manage PBX page press the + button to add a new extension.

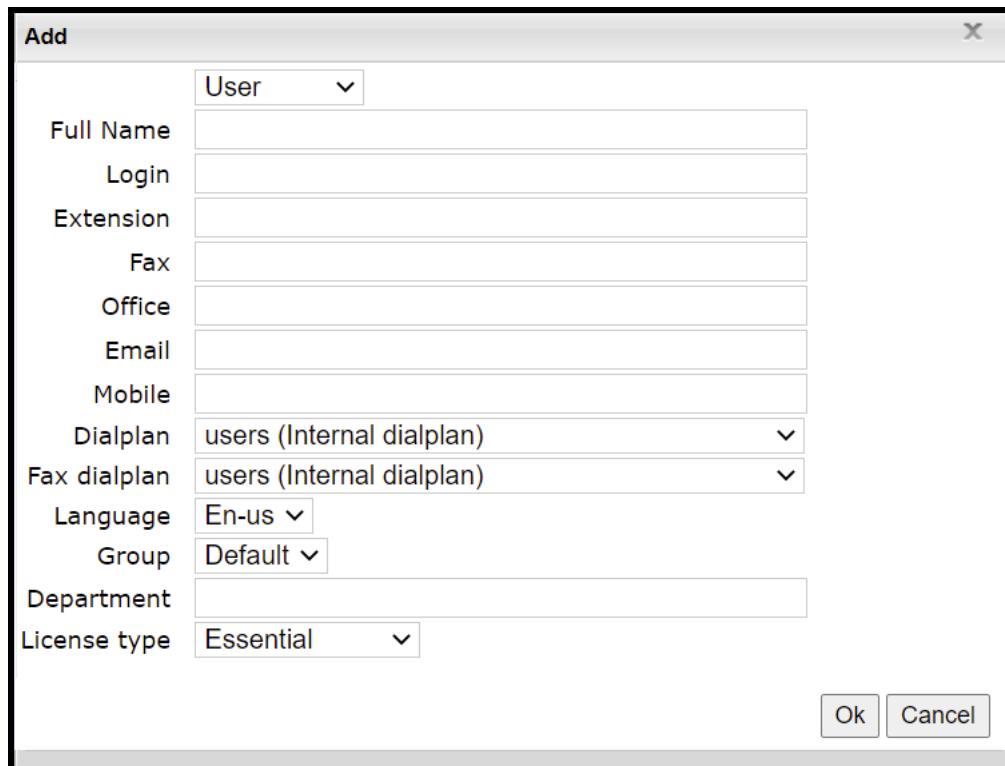
Figure 4-3: Manage PBX



	Full Name	Login	Extension	Fax	Office	Email	Mobile	Dialplan	Fax dial...	Group	Department	License type
admin	admin	admin						internalc...	internalc...	Admin		
Rob			201		+16145552123			users	users	New		Premium
Todd			202		+16145552122			users	users	Old		Premium
ZD Paul			203		+16144841530			users	users	Admin		Premium
Cyberdata			300					users	users	Admin		Premium
Yealink Phone			204					users	users	Default		Essential
CyberData Nightringer			301					users	users	Default		Essential

- A pop-up to create the extension will appear.

Figure 4-4: Extension creation



The dialog box contains the following fields:

- User dropdown menu (highlighted)
- Full Name
- Login
- Extension
- Fax
- Office
- Email
- Mobile
- Dialplan: users (Internal dialplan)
- Fax dialplan: users (Internal dialplan)
- Language: En-us
- Group: Default
- Department
- License type: Essential
- Ok and Cancel buttons

5. Make sure the drop-down menu has **User** selected.
6. Set the full name to the location of the call button.
7. Set the **Extension Number** desired for the device.

Note: Other values can be set, but for the purposes of this guide all other fields are left blank.

Figure 4-5: Filled Extension Popup

The screenshot shows a Windows-style 'Edit' dialog box. At the top left is the word 'Edit'. In the top right corner is a close button ('X'). Below the title bar are several input fields and dropdown menus:

- Full Name:** Cyberdata SIP Call Button
- Extension:** 300
- Dialplan:** users (Internal dialplan)
- Fax dialplan:** users (Internal dialplan)
- Language:** En-us
- Group:** Admin
- License type:** Premium

At the bottom right of the dialog box are two buttons: 'Ok' and 'Cancel'.

8. After filling the values press **Ok** to create the extension.
9. After creating the extension, select it out of the list.

Figure 4-6: Extension created

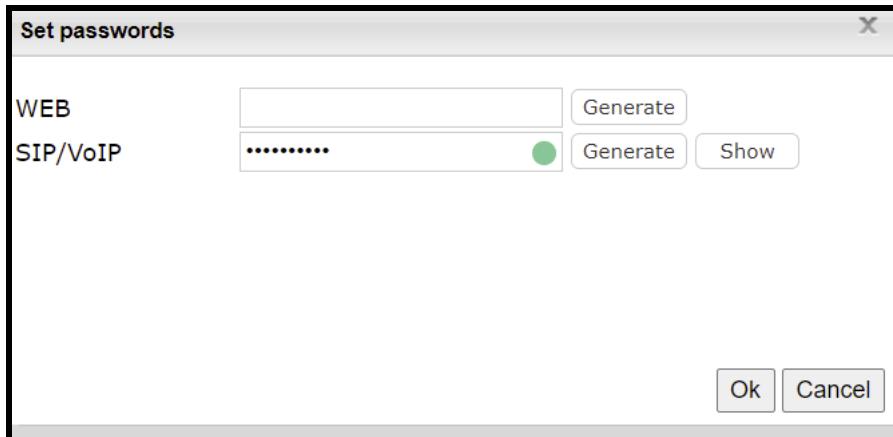
	Full Name	Login	Extension	Fax	Office	Email	Mobile	Dialplan	Fax dial...	Group	Department	License type
•	admin	admin						internalc...	internalc...	Admin		
•	Rob		201	+16145552123				users	users	New		Premium
•	Todd		202	+16145552122				users	users	Old		Premium
•	ZD Paul		203	+16144841530				users	users	Admin		Premium
•	Cyberdata SIP Call Button		300					users	users	Admin		Premium
•	Yealink Phone		204					users	users	Default		Essential
•	CyberData Nightringer		301					users	users	Default		Essential

+ Edit - Set passwords Edit preferences Send Welcome Message

10. After selecting the extension, press **Set Passwords**.

11. Click on the **Generate** button to create a password.

Figure 4-7: Set Passwords Popup



12. Click the show button and copy the auto-generated password which will be required in the next section.

5.0 Configuration Procedure: Setting up the Paging Extension

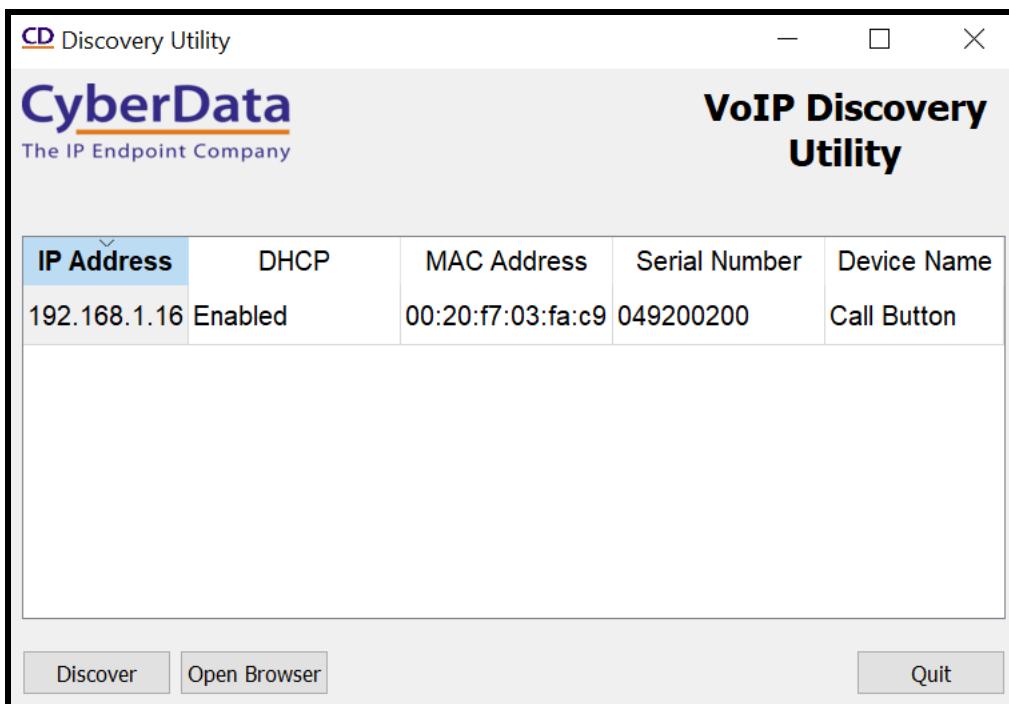
If you are configuring through the web interface, use the following steps to login to the web interface of your CyberData device.

Table 5-1: Setting Name correlation

CyberData Setting	Wildix Provisioning Pop-up
Primary SIP Server	SIP Domain
Primary SIP User ID	Extension Number
Primary SIP Auth ID	Extension Number
Primary SIP Auth Password	Password

1. Click **Launch Browser** from the CyberData Discovery Utility or point your browser to the CyberData device's IP address to access the Home Page of the web interface.

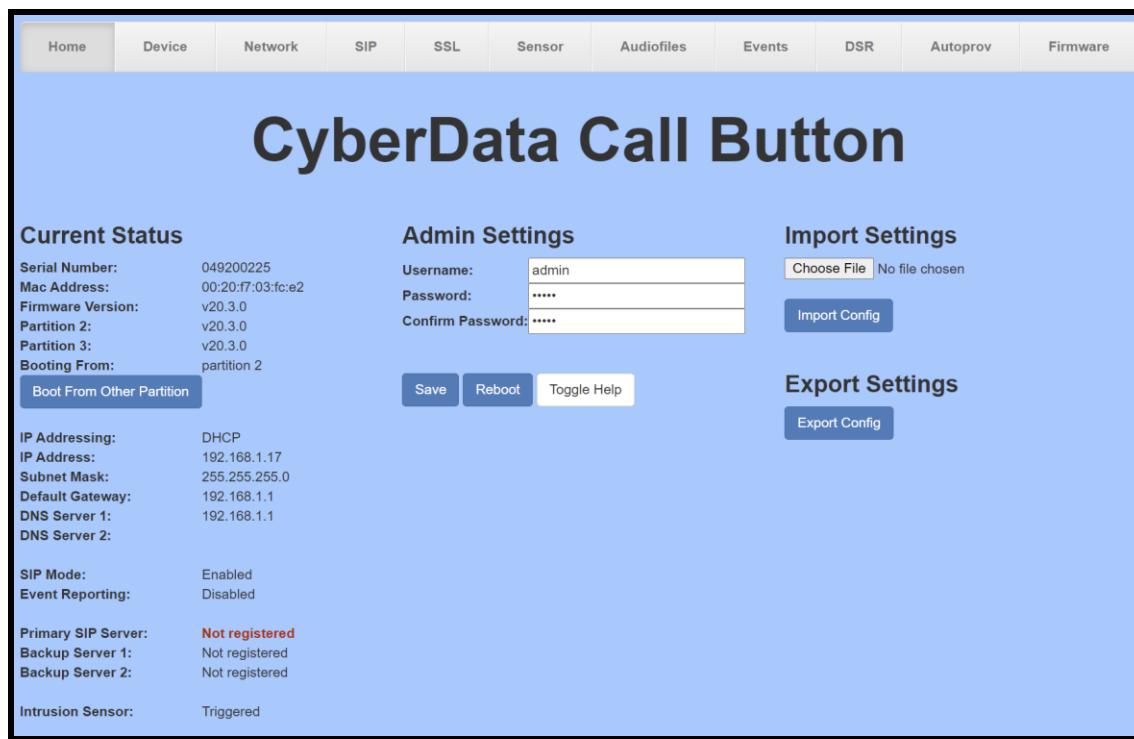
Figure 5-1: CyberData Discovery Utility



2. Enter the default credentials when prompted and click the **Log In** button.

Username: admin
Password: admin

Figure 5-2: Home Tab



3. Navigate to the SIP tab.

Figure 5-3: SIP Tab

The screenshot shows the 'SIP' tab of the CyberData Call Button configuration interface. The main title is 'CyberData Call Button'. The 'SIP Settings' section contains fields for Primary and Backup SIP servers, user IDs, auth IDs, and passwords, along with registration intervals and proxy port settings. The 'Dial Out Settings' section includes fields for extension, extension ID, multicast audio, and message repeat. The 'Call Disconnection' section has a field for terminating calls after a delay. The 'Audio Codec Selection' section allows selecting a codec. The 'RTP Settings' section defines RTP port, jitter buffer, and encryption. At the bottom are 'Save', 'Reboot', and 'Toggle Help' buttons.

SIP Settings		Dial Out Settings	
Enable SIP operation:	<input checked="" type="checkbox"/>	Dial out Extension:	204
Register with a SIP Server:	<input checked="" type="checkbox"/>	Extension ID:	id204
Primary SIP Server:	wildixstudent9.wildixin.com	Send Multicast Audio:	<input type="checkbox"/>
Primary SIP User ID:	300	Multicast Address:	224.5.5.5
Primary SIP Auth ID:	300	Multicast Port:	5050
Primary SIP Auth Password:	*****	Repeat Message:	1
Re-registration Interval (in seconds):	360		
Backup SIP Server 1:	<input type="text"/>		
Backup SIP User ID:	<input type="text"/>		
Backup SIP Auth ID:	<input type="text"/>		
Backup SIP Auth Password:	<input type="text"/>		
Re-registration Interval (in seconds):	360		
Backup SIP Server 2:	<input type="text"/>		
Backup SIP User ID:	<input type="text"/>		
Backup SIP Auth ID:	<input type="text"/>		
Backup SIP Auth Password:	<input type="text"/>		
Re-registration Interval (in seconds):	360		
Remote SIP Port:	5060		
Local SIP Port:	5060		
SIP Transport Protocol:	UDP		
TLS Version:	1.2 only (recommended)		
Verify Server Certificate:	<input type="checkbox"/>		
Outbound Proxy:	<input type="text"/>		
Outbound Proxy Port:	0		
Use Cisco SRST:	<input type="checkbox"/>		
Disable rport Discovery:	<input type="checkbox"/>		
Unregister on Boot:	<input type="checkbox"/>		
Keep Alive Period:	10000		
Call Disconnection Terminate Call after delay: <input type="text"/>			
Audio Codec Selection Codec: <input type="button" value="Auto Select"/>			
RTP Settings RTP Port (even): <input type="text" value="10500"/> Jitter Buffer: <input type="text" value="50"/> RTP Encryption (sRTP): <input type="button" value="Disabled"/>			
<input type="button" value="Save"/> <input type="button" value="Reboot"/> <input type="button" value="Toggle Help"/>			

4. Set the Primary SIP Server with the FQDN of the Wildix Server
5. Set the Primary SIP User ID to the extension number.
6. Set the Primary SIP Auth ID to the extension number.
7. Set the Primary SIP Auth Password to the auto generated password from the provisioning pop-up.
8. Save.
9. Reboot.

After the reboot the Call Button should be registered with Wildix.

Figure 5-4: Home Tab - Registered.

Current Status		Admin Settings			Import Settings		Export Settings	
Serial Number:	049200200	Username:	admin		Choose File	No file chosen	Import Config	Export Config
Mac Address:	00:20:f7:03:fa:c9	Password:	****					
Firmware Version:	v20.3.0	Confirm Password:	****					
Partition 2:	v20.3.0							
Partition 3:	v20.3.0							
Booting From:	partition 2							
Boot From Other Partition		Save	Reboot	Toggle Help				
IP Addressing:	DHCP							
IP Address:	192.168.1.28							
Subnet Mask:	255.255.255.0							
Default Gateway:	192.168.1.1							
DNS Server 1:	192.168.1.1							
DNS Server 2:								
SIP Mode:	Enabled							
Event Reporting:	Disabled							
Primary SIP Server:	Registered							
Backup Server 1:	Not registered							
Backup Server 2:	Not registered							
Intrusion Sensor:	Triggered							

6.0 Using the CyberData Call Button in a Wildix system.

CyberData SIP Call Buttons are designed for sending a call to a phone or making an announcement. The button can call an extension number, ring group/call queue, or send multicast audio. When the call button is pressed it will make a call to the configured number and play a pre-recorded WAV File.

6.1 Setting the Dialout extension and loading an audio file

Once the call button is registered with Wildix, the Dialout extension will need to be configured and an audio file may be loaded to customize the message. The Dialout extension is set on the SIP tab.

Figure 6-1: Set Dialout Extension

The screenshot shows the 'SIP Settings' configuration page. The 'Dial Out Settings' section is highlighted with a yellow box. It contains the following fields:

- Dial out Extension: 204
- Extension ID: John's Panic Button
- Send Multicast Audio:
- Multicast Address: 224.5.5.5
- Multicast Port: 5050
- Repeat Message: 1

The rest of the page includes sections for 'Call Disconnection', 'Audio Codec Selection' (Codec: Auto Select), and 'RTP Settings' (RTP Port (even): 10500, Jitter Buffer: 50, RTP Encryption (sRTP): Disabled). At the bottom are 'Save', 'Reboot', and 'Toggle Help' buttons.

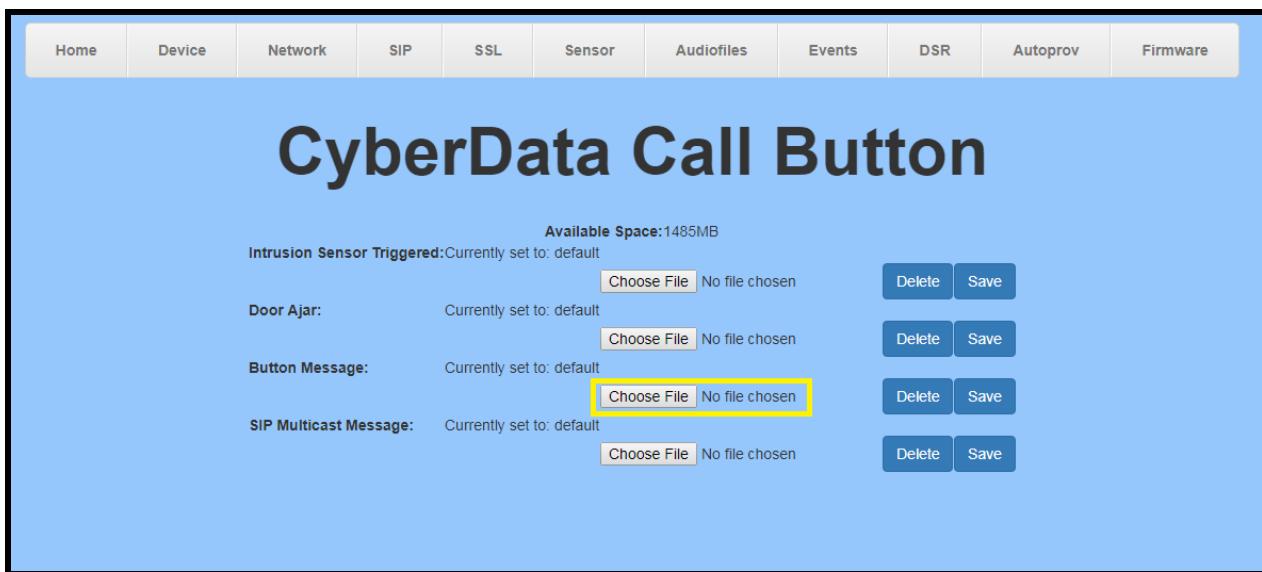
6.2 Load the Audio file

CyberData devices require audio files in a specific format. The process to convert audio files to WAV format is covered in the operations manual for the SIP Call button

- Microsoft PCM
- 16 Bit
- Mono
- 8000Hz
- WAV format

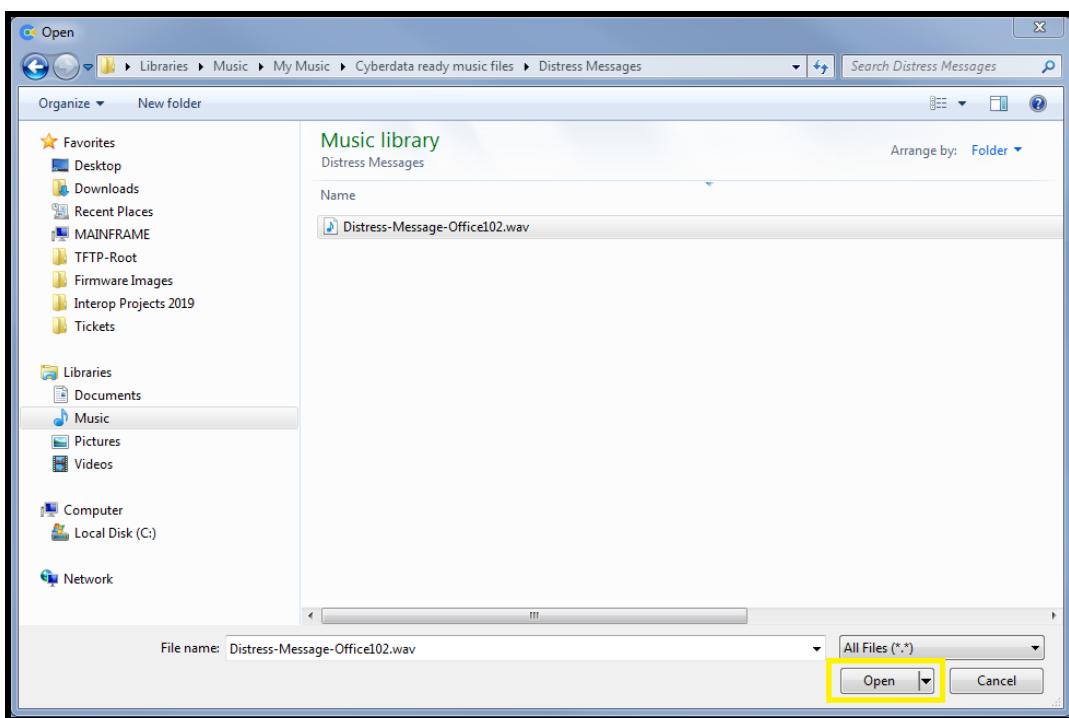
1. After creating the audio file that will be used, load that file on the **Audiofiles Tab**.

Figure 6-2: Audiofiles tab



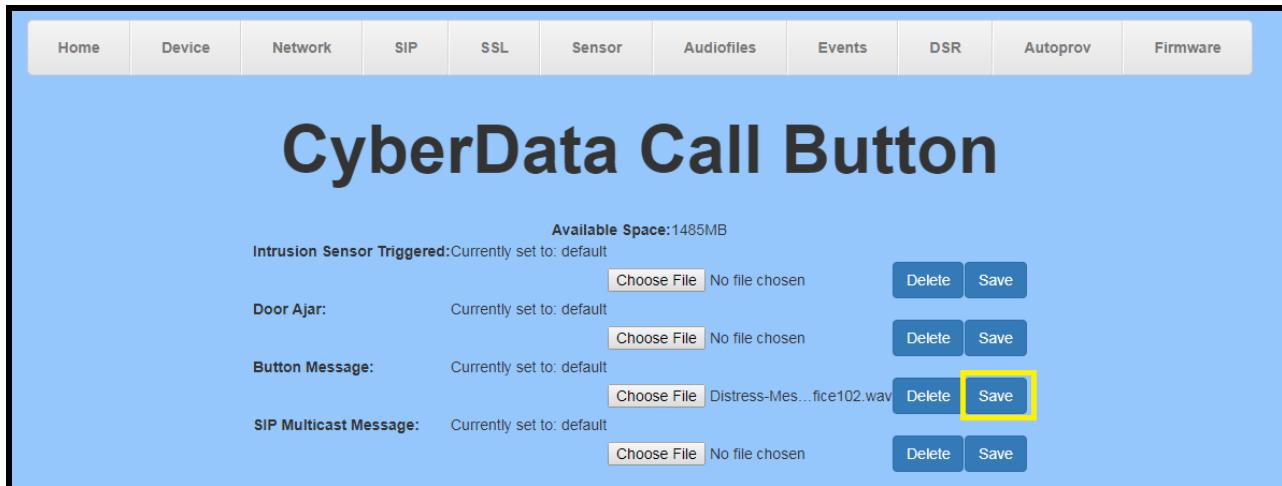
2. Press the Choose File button, then select the audio file.

Figure 6-3: Select the Audio file



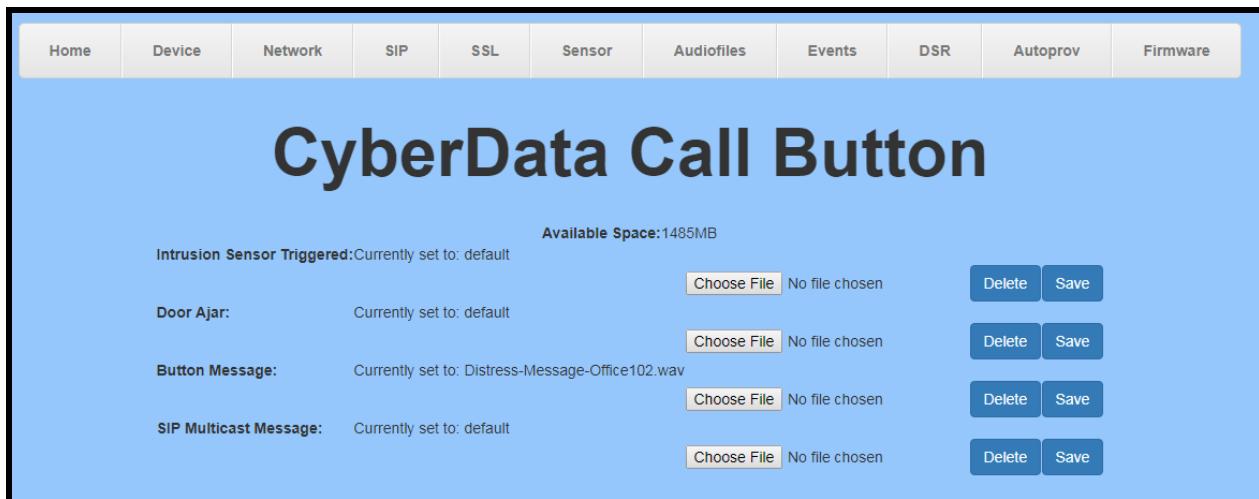
- Once the audio file is selected, press the save button to load the audio file.

Figure 6-4: Save File



4. Once the file is loaded, a press of the call button will trigger the message.

Figure 6-5: Loaded Audio File



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 Wildix PBX solution may render this document obsolete. We welcome and encourage documentation feedback to ensure continued applicability.