



## *CyberData WiFi Alert Button Setup Guide*

Document Part # 931822C

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## **CyberData WiFi Alert Button Setup Guide** **Document# 931822C**

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## Revision Information

- 1-7-21 Initial Release
- 2-25-21 Update to network configuration.
- 3-14-2023 Update to guide name “WiFi Alert Button Setup Guide”
  - Adding new section: [4.0 Adding a WiFi Alert Button to a WiFi Network](#)
  - Adding new section: [5.0 Configuration of WiFi Buttons with a SIP Paging Server](#)

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## 1.0 Preparing the Environment

The CyberData WiFi Alert Button is used to trigger a message from a SIP Paging Server or InformaCast. When used in an InformaCast environment the button does not register to InformaCast like a typical InformaCast enabled device, but it does interact with the server.

When using the WiFi Alert Button with the CyberData SIP Paging Server, the buttons will need access to the same network segment as the paging server. Depending on network configuration the VoIP Network may need WiFi access for the buttons to communicate with the paging server.

To properly use the buttons in an InformaCast environment, CyberData recommends having already setup the InformaCast Server, Speaker groups, and Service Location Protocol (SLP). The button uses SLP to discover the server which allows for a faster deployment. If using SLP is not possible on the network, the WiFi Button Utility allows the InformaCast Server to be set using the SNMP button.

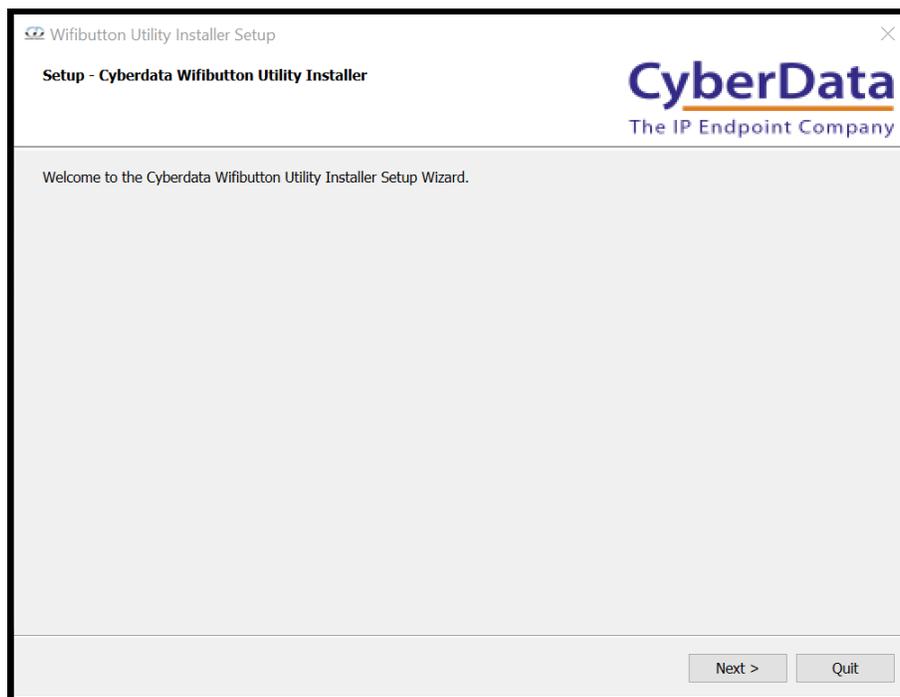
The WiFi buttons will require the ability to contact the InformaCast server or the SIP Paging Server. As such this will require WiFi Alert Button to have access to the relevant network segment.

## 2.0 Installing the Tool

This section will walk through the setup of the CyberData Wifi Button Utility. This tool is designed to setup and manage the buttons.

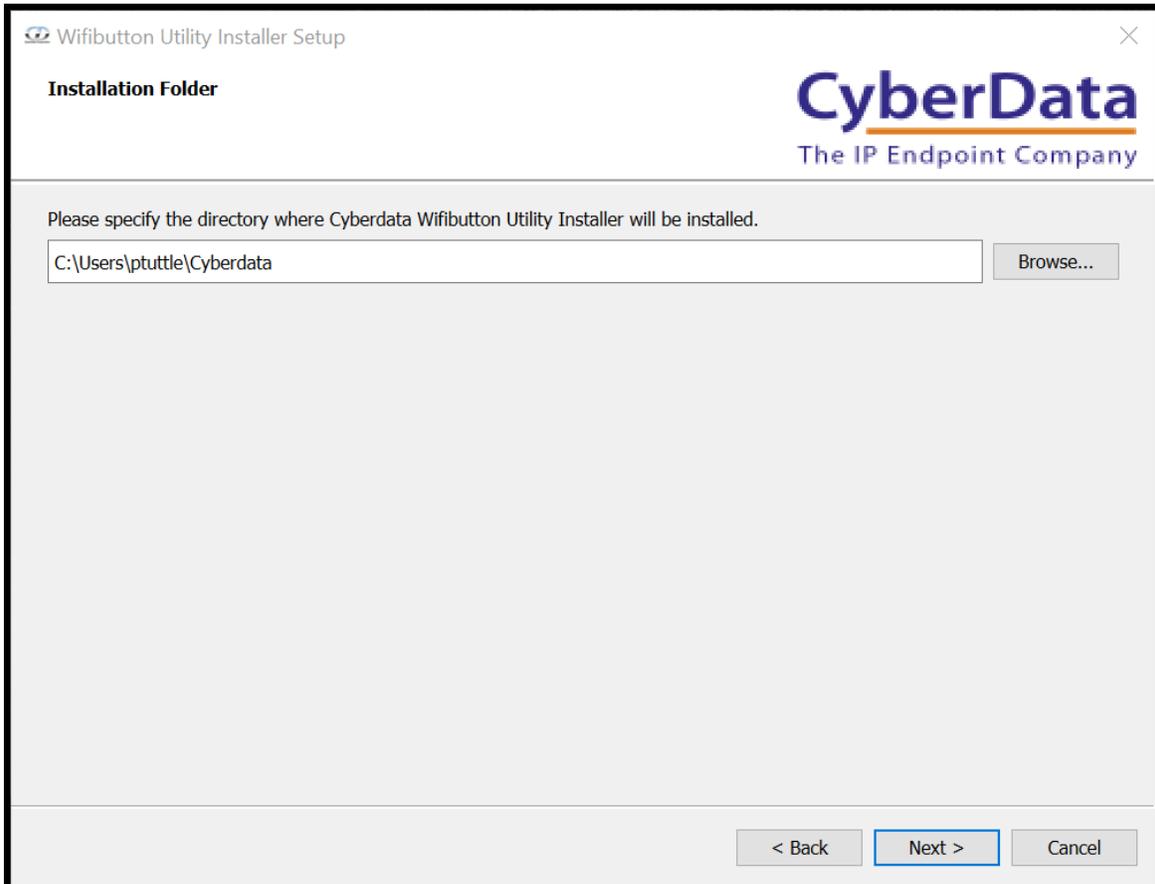
1. Download and unzip the CyberData WiFi Button Utility.
2. Double click on the wb\_installer.exe file to start the installation.
3. Once you have the Installer Setup Wizard window, press Next to begin.

**Figure 2-1. Installer Setup Welcome**



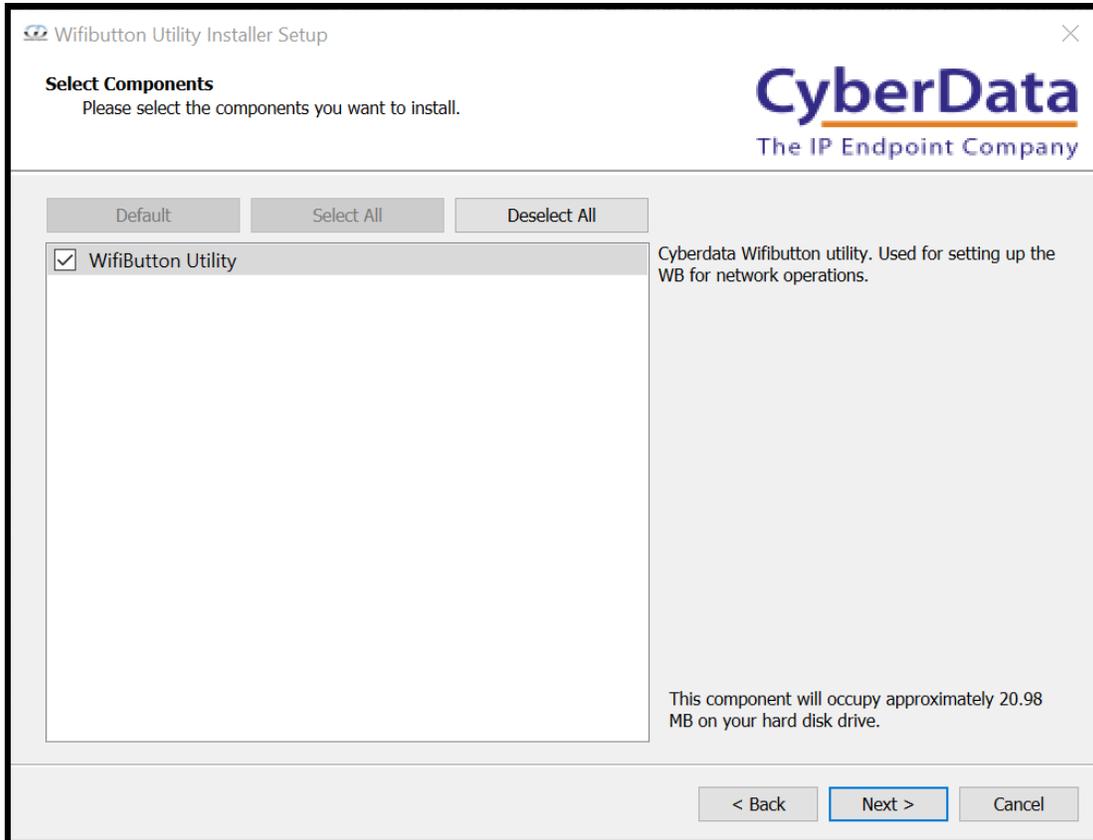
4. Confirm the installation location or press the Browse button to select a new install location.
5. Press Next to continue.

**Figure 2-2.** Select Install Location



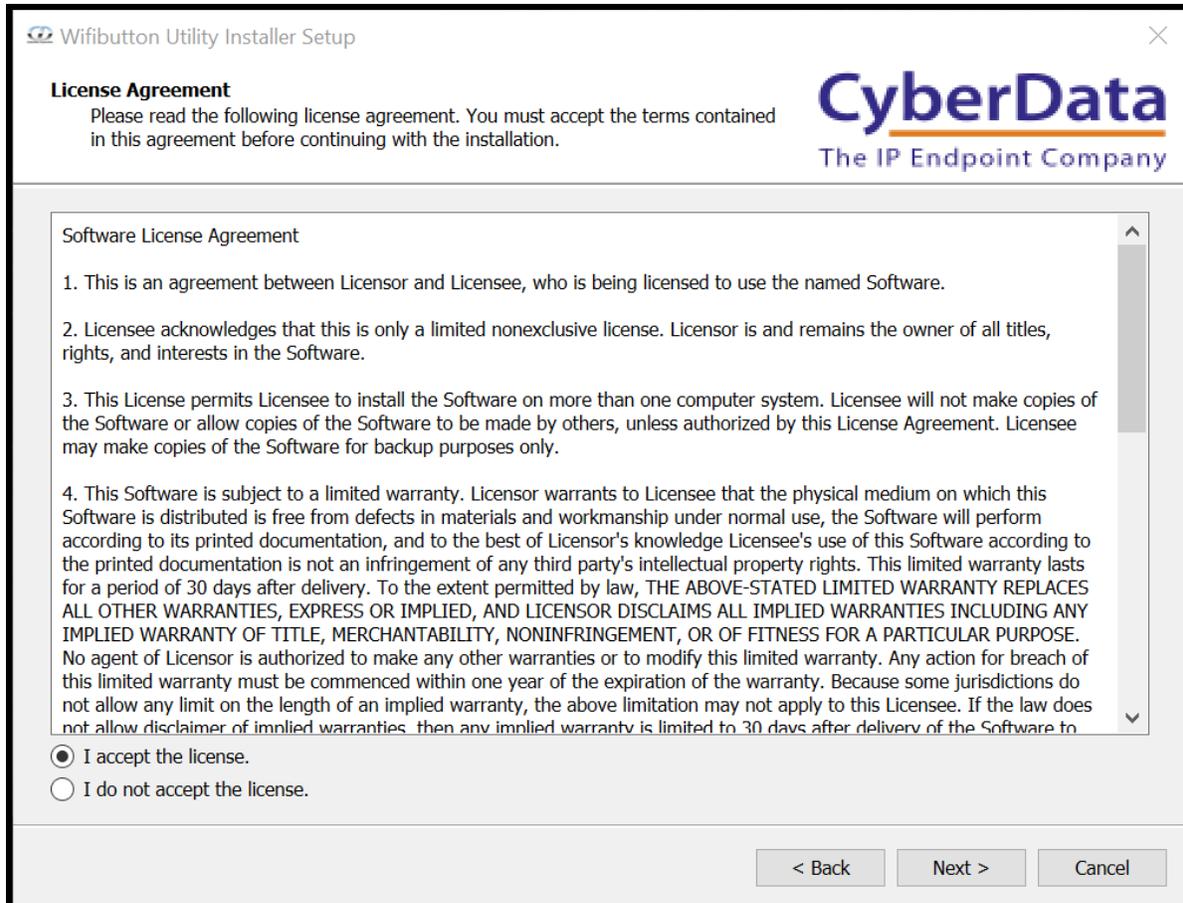
6. Check the box for “WiFi Button Utility”.
7. Press Next to continue.

**Figure 2-3. Pick Utility to Install**



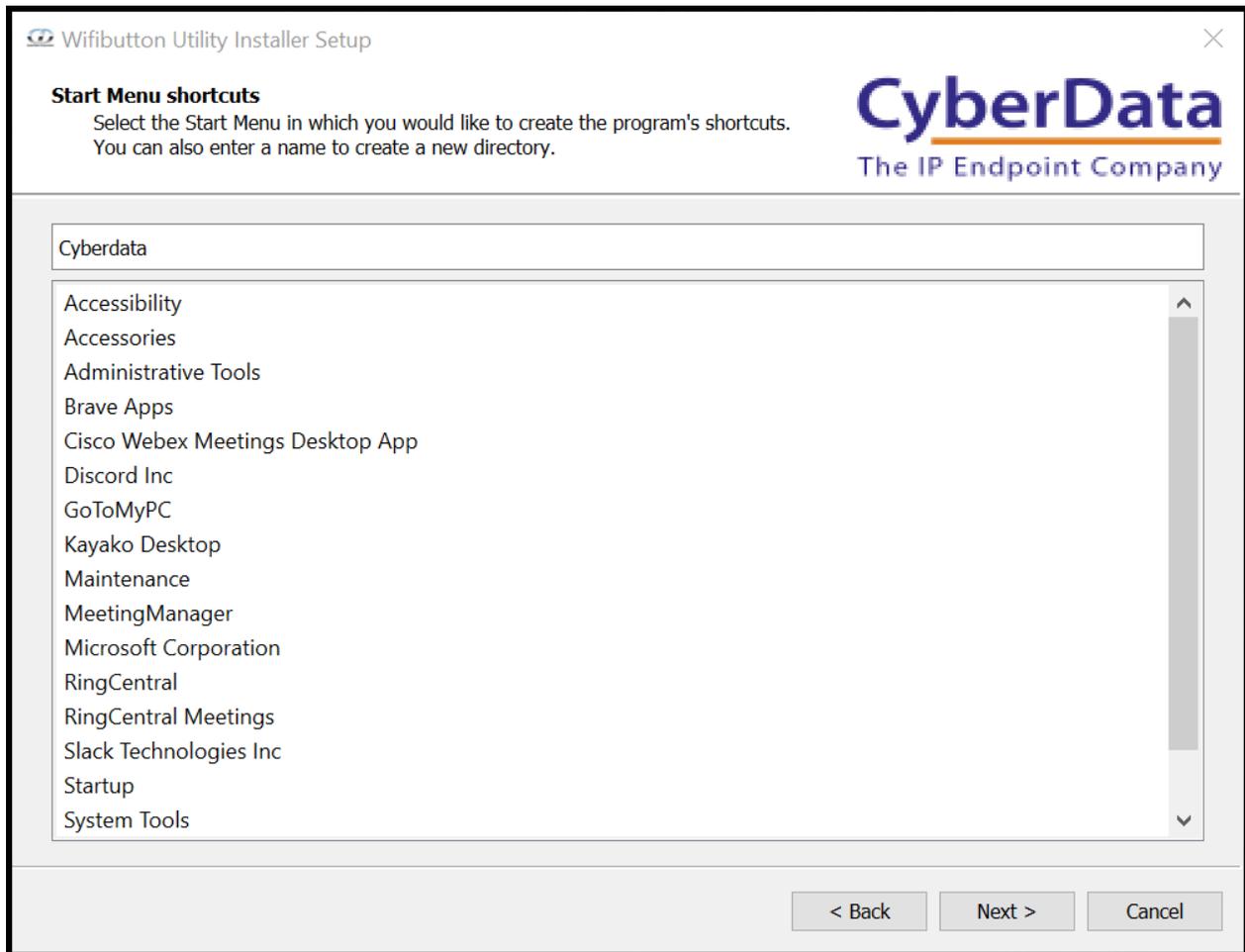
8. Read and Agree to the License Agreement.
9. Press Next to continue.

**Figure 2-4. License Agreement**



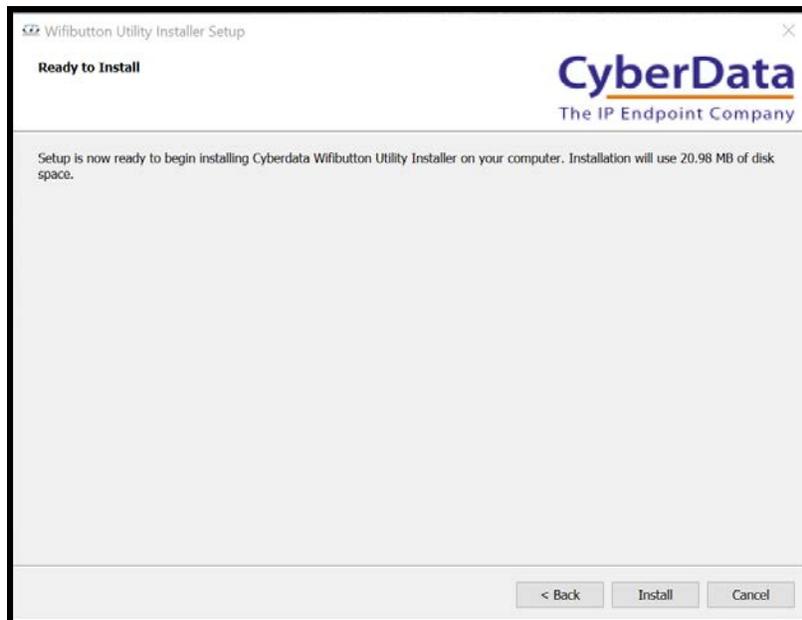
10. Set the start menu shortcut location.
11. Press next to continue.

**Figure 2-5. Start Menu Shortcuts**



12. The utility is ready to be installed, press the Install button to begin installation.

**Figure 2-6. Ready to Install**



13. Once the install is complete, press the Finish button.

**Figure 2-7. Installation Complete**

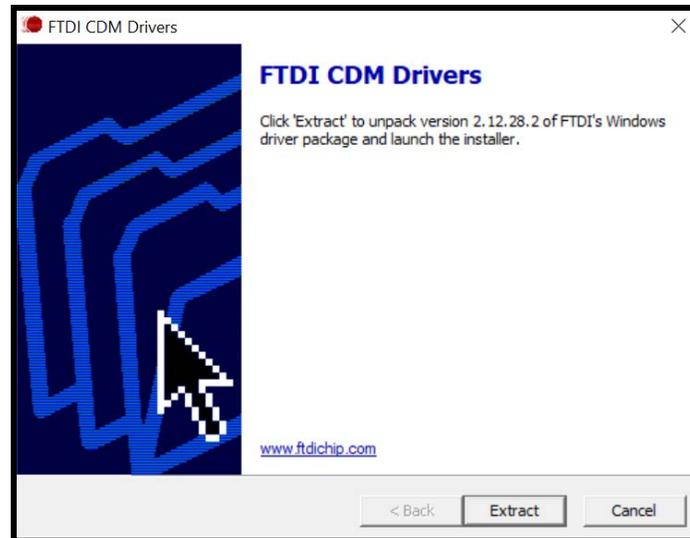


## 2.1 Installing the FTDI driver

One of the chips used by the WiFi Alert Button requires a special driver so the host PC can interact with the button correctly. Please follow these steps to install the driver.

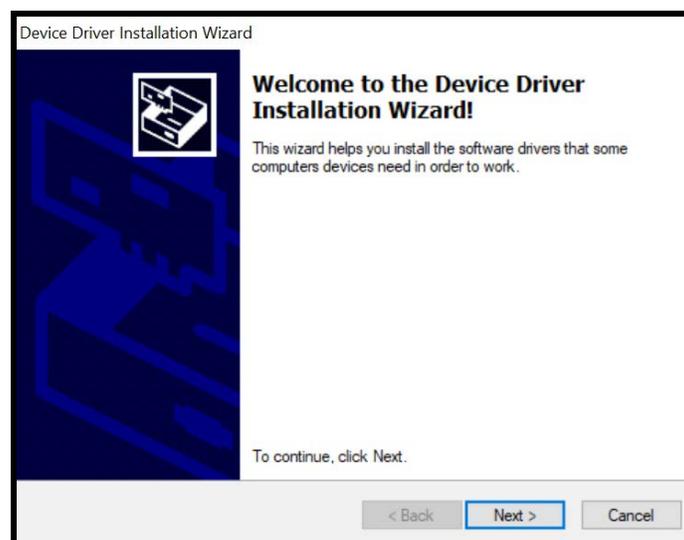
1. Run the included CDM21228\_Setup.exe executable file to install the driver.
2. Press **Extract** to unpack the installer.

**Figure 2-8.** Extract the driver installer



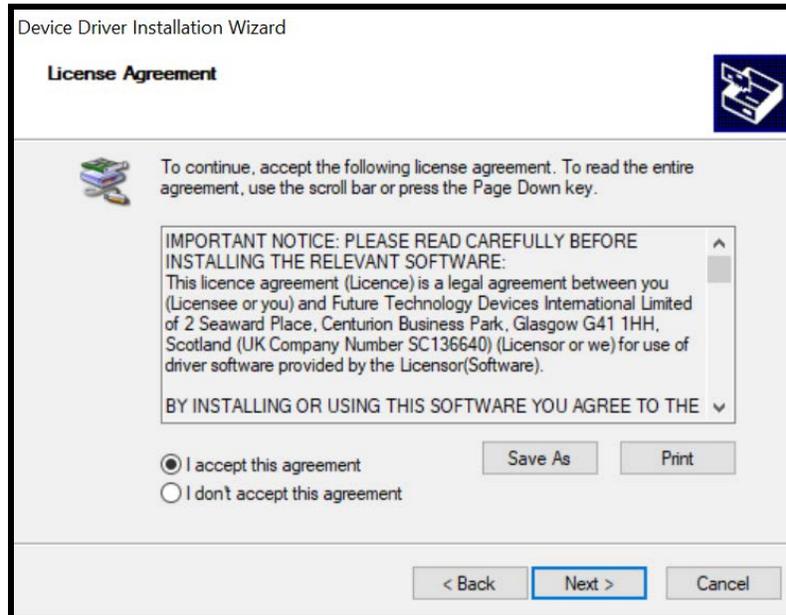
3. Press **Next** to begin the installation process.

**Figure 2-9.** Installation Wizard

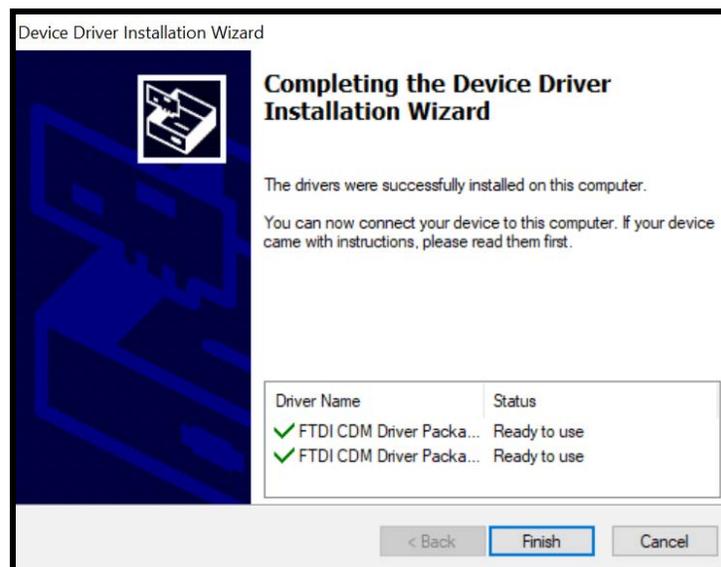


4. Read the license agreement.
5. Check **I accept this agreement**.
6. Press **Next** to begin installation

**Figure 2-10. License Agreement**



7. Press **Finish** to complete the installation.



The utility and drivers are installed on the host PC. The WiFi buttons can now be connected and configured for the environment.

### 3.0 Using the Tool

This section will detail using the tool and the various button functions.

**Figure 3-1.** WiFi Alert Button Utility



The tool shows all relevant information to finding and setting up buttons on the network.

- MAC Address
- Serial Number
- Device Name
- Battery Soc (%)
- RSSI (dBm)
- Connection (WiFi or USB)

### 3.1 Button Explanations

The Utility has several functional buttons that can be interacted with; **Configure, Discover, Buzzer/LED, Log, SNMP, and Quit.**

**Discover** will scan the network and report back any discovered CyberData WiFi Buttons.

**Figure 3-2. Devices discovered on the network**

The screenshot shows the 'WiFi Alert Button Utility' window. At the top left is the CyberData logo and 'The IP Endpoint Company'. The title bar reads 'WiFi Alert Button Utility, version v2.4.0'. The main title is 'WiFi Alert Button Utility'. Below the title is a table with the following columns: MAC Address, Serial Number, Device Name, Battery SoC (%), RSSI (dBm), and Connection. The table contains 8 rows of data. At the bottom of the window, there are six buttons: Configure, Discover, Buzzer/LED, Log, SNMP, and Quit.

MAC Address	Serial Number	Device Name	Battery SoC (%)	RSSI (dBm)	Connection
00:20:f7:04:86:2f	527000106	WiFi Button	100	-55	WiFi
00:20:f7:04:86:30	527000107	WiFi Button	100	-61	WiFi
00:20:f7:04:86:2e	527000105	WiFi Button 105	99	-50	WiFi
00:20:f7:04:61:d1	480000104	WiFi Button	100	-47	WiFi
00:20:f7:04:86:32	527000109	WiFi Button	99	-59	WiFi
00:20:f7:04:86:2c	527000103	WiFi Button 103	99	-52	WiFi
00:20:f7:04:86:2d	527000104	WiFi Button 104	100	-48	WiFi
00:20:f7:04:86:2b	527000102	WiFi Button	99	-51	WiFi

### 3.3.1 Edit Button Configuration

**Edit** will allow a user to change several settings relating to the button including network connection, Firmware, and the boot partition. These settings include IP Source (DHCP or Static), NTP Server, Timezone, SSID, and PSK (WiFi Password).

**Figure 3-3.** Edit Settings

The screenshot shows a web-based configuration interface for a device. The title is "Device Configuration". The main heading is "Device Configuration". The interface includes several input fields and controls:

- Serial Number: 527000109
- MAC Address: 00:20:f7:04:86:32
- Device Name: WiFi Button
- FW Version: v2.4.0
- IP Assignment:  DHCP,  Static
- Time Zone: America/Los\_Angeles (dropdown)
- IP Address: 10.10.1.98
- Subnet Mask: 255.0.0.0
- Default Gateway: 10.0.0.1
- DNS Server: 10.0.1.56
- NTP Server: pool.ntp.org
- SSID: cd\_prod24
- PSK: (empty field)
- Battery SoC: 99
- Power Source: Line
- Logging Host IP: 239.255.255.255
- Last Boot Time: 2021.01.06 15:22:07

Below the settings are several buttons: AP Scan, FW Update, Set Boot Partition, Reset to Factory, and Restart. To the right of these buttons is a table with two columns: SSID and RSSI. The table is currently empty. Below the table, it says "AP scan idle." At the bottom right, there are "Commit" and "Cancel" buttons.

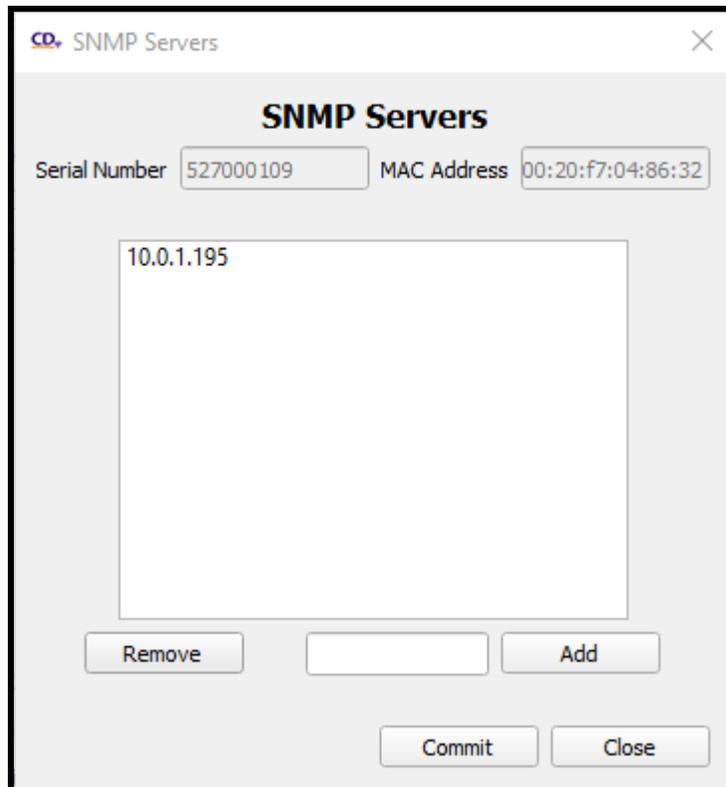
This window also features an AP Scan or Access Point Scan feature to find and detect access points that the button can connect to. Pressing AP Scan will have the tool scan the local network to detect access points.

### 3.3.2. SNMP Servers

SNMP allows the selection of the InformaCast server the button will interact with. This page allows the manual configuration of the InformaCast server if SLP is not enabled. Pressing Add will create a pop-up window that allows entry of the InformaCast servers IP Address.

*Note: The InformaCast Server's IP Address must be reachable by the Access Point that the button is connected to.*

**Figure 3-4. SNMP**



### 3.3.3 Buzzer and LED Behavior

The Buzzer/LED button allows the adjustment of the buzzer and the LED on the button itself. There are adjustments for both the LED and Buzzer for both power options, line power connected to AC power adapter or on Battery power.

Figure 3-5. Buzzer/LED

**Buzzer/LED Behavior**

Serial Number: 527000109      MAC Address: 00:20:f7:04:86:32

Power Source	Component	Volume/Intensity	Pattern
Line Power	Buzzer	volume: [slider]	SOLID OFF
	LED	intensity: [slider]	SOLID ON
Battery Power	Buzzer	volume: [slider]	SOLID OFF
	LED	intensity: [slider]	BLIP SLOW

**Button Durations**

Button Press Duration: 100 ms

Button ACK Timeout: 5 seconds

Save      Cancel

**Table 3-1. Buzzer/LED pattern explanations**

<b><u>Buzzer</u></b>		<b><u>LED</u></b>	
Solid Off	Buzzer Off	Solid Off	LED Off
Solid On	Buzzer On	Solid On	LED On
Flash Slow	Buzz slowly	Flash Slow	LED Flash slowly
Flash Rapid	Buzz quickly	Flash Rapid	LED Flash rapidly
Blip Slow	Short buzzes	Blip Slow	LED Blink slowly
Fade	Buzz	Fade	LED Fade in and out

**Button Press Duration** controls how long the button should be pressed before it takes an action. This is also known as a ‘debounce timer’.

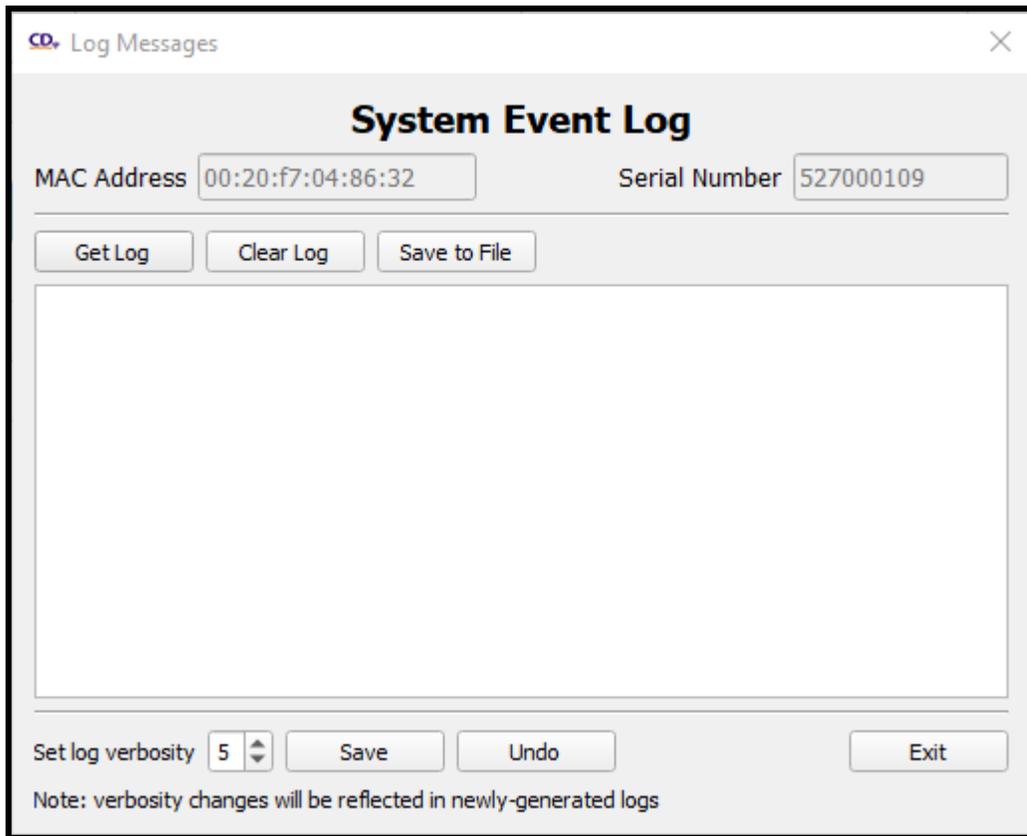
**Button ACT Timeout** controls how long the button will blink and/or buzz after it has been pressed.

### 3.3.4 System Event Log

**Log** button allows the gathering and viewing of logs from a button. The logs for all buttons are logged per button. The logs can be viewed directly through the WiFi Button utility or can be saved to the PC running the utility.

**Set log verbosity** changes the verbosity or the amount of information printed in the logs. It is normal for this to be left at the default verbosity of 5.

**Figure 3-6.** Log button

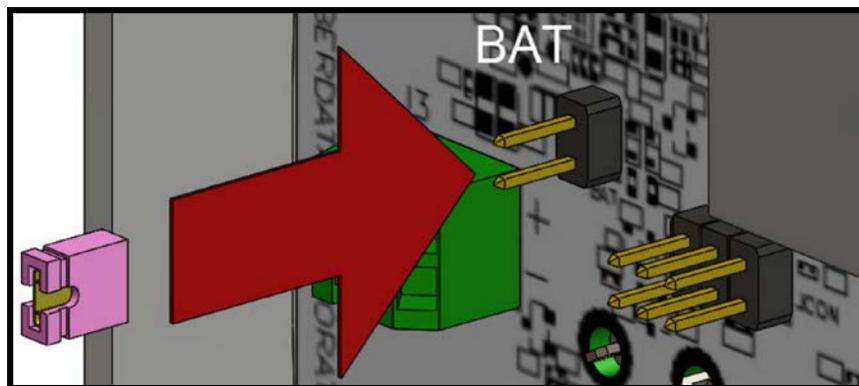


## 4.0 Adding a WiFi Alert Button to a WiFi Network

This section outlines the process of adding a WiFi alert button to a specific WiFi Network. This process is shared for use with both the SIP Paging Server and in InformaCast Environments.

1. Start the WiFi Button Utility
2. Remove the back cover to the WiFi button by removing the small screw at the bottom of the enclosure.
3. Take the included shunt and attach it to both posts for the Battery. This should be labeled BAT on the circuit board.

**Figure 4-1:** Attach Battery Shunt

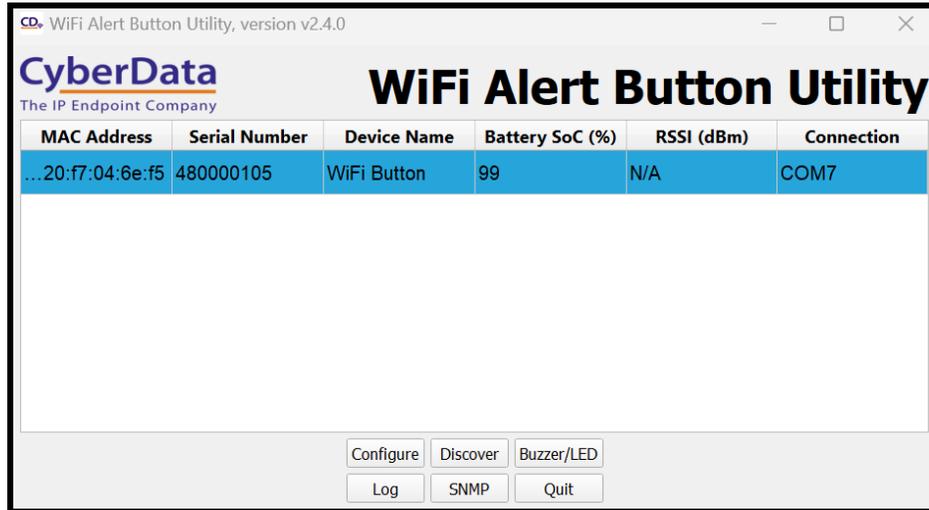


4. Insert the included Micro USB cable into the Micro USB Port, this should be labeled J1 on the circuit board.
5. Connect the other end of the USB cable to the Windows based PC running the WiFi Button utility.

Note: The button's led around the button should light up blue and begin blinking.

6. If the button has not appeared in the list on the utility, press the Discover button. The button should appear shortly after pressing Discover.

**Figure 4-2:** Button in WiFi Button Utility



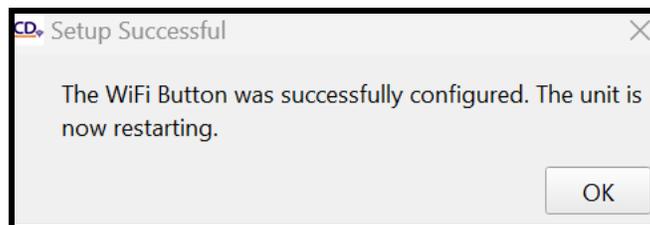
7. If multiple buttons are shown confirm the serial number of the unit, then select it out of the list and press **Configure**.
8. In the device configuration pop-up change all necessary settings, such as network (Static vs DHCP), NTP, and Time zone.
9. Next press **AP Scan** to discover all local Access Points and select the desired SSID from the list. The SSID can also be manually entered.
10. Set the PSK or password for the SSID.

**Figure 4-3: Device Configuration Pop-up**

SSID	RSSI
SpectrumSe...	-45
MySpectru...	-56
ATTabUIWQs	-63
ATTORSEI228	-64

11. Press the **Commit** button to push the changes to the button.
12. In the subsequent pop-up press Save to confirm.
13. A final pop-up should appear stating the button has received the configuration and is rebooting.

**Figure 4-4: Setup Successful**



After the quick reboot process the button's LED should illuminate and stay solid. This means the unit is on the Wifi network and is ready to be installed in it's final location.

For setup with a SIP Paging Server please proceed to the next section. If using the button with InformaCast please proceed to section [6.0 Setting up SNMP on InformaCast](#).

## 5.0 Configuration of WiFi buttons with a SIP Paging Server

Support for CyberData’s WiFi Alert Buttons is a new feature added with SIP Paging Server v20.1.0. This version of firmware is a free upgrade but is only valid for SIP Paging Server (011146) with serial numbers of 1462xxxxx.

1. Navigate to the web interface of the SIP Paging Server and proceed to the WiFi-Buttons tab.
2. Assuming the SIP Paging Server and WiFi Alert buttons are on the same network segment upon loading the page all WiFi buttons should be shown in the drop down menu. If the buttons do not appear, simply press the **Discover** button.

**Figure 5-1: WiFi-Buttons Tab**



3. Press the **View/Config** button to view and adjust the actions taken when a particular button is pressed.

When the button is pressed it can, send a stored message to a specific page group and have the paging server generate a call to a specific extension number. The heartbeat timeout can also be adjusted to send a notification of a button going offline. Finally the buzzer volume, pattern, and LED Brightness can be adjusted.

**Figure 5-2: Button Settings**

### Button Settings

Serial Number:	480000105	<div style="margin-bottom: 5px; background-color: #0070c0; color: white; padding: 2px 5px; border: 1px solid #0070c0;">Save</div> <div style="margin-bottom: 5px; background-color: #0070c0; color: white; padding: 2px 5px; border: 1px solid #0070c0;">Get Log</div> <div style="margin-bottom: 5px; background-color: #0070c0; color: white; padding: 2px 5px; border: 1px solid #0070c0;">Clear Log</div> <div style="margin-bottom: 5px; background-color: #0070c0; color: white; padding: 2px 5px; border: 1px solid #0070c0;">Restart Button</div> <div style="margin-bottom: 5px; background-color: #0070c0; color: white; padding: 2px 5px; border: 1px solid #0070c0;">Cancel</div> <div style="margin-bottom: 5px; background-color: #f0f0f0; padding: 2px 5px; border: 1px solid #ccc;">Toggle Help</div>
MAC Address:	00:20:f7:04:6e:f5	
Firmware Version:	v2.4.0	
Battery SoC	100%	
Power Source	Line	
Addressing Mode	<input type="radio"/> Static <input checked="" type="radio"/> DHCP	
IP Address:	192.168.1.18	
Subnet Mask:	255.255.255.0	
Default Gateway:	192.168.1.1	
DNS Server:	192.168.1.1	
SSID:	SoFlyForAWiFi	
NTP Server:	pool.ntp.org	
Time Zone:	PST+8PDT,M3.2.0,M1	
Device Name:	WiFi Button	
Logging IP Address:	239.255.255.255	

---

Button Press Duration (ms):

Button press PGROUP:

Button press MSG:

Times to play MSG:

Button press Ext:

Heartbeat timeout (seconds):

Heartbeat timeout PGROUP:

Heartbeat timeout MSG:

Times to play MSG:

Heartbeat timeout Ext:

Buzzer Volume (Line 0-10):

Buzzer Pattern (Line):

Buzzer Volume (Batt 0-10):

Buzzer Pattern (Batt):

LED Brightness (Line 0-10):

LED Pattern (Line):

LED Brightness (Batt 0-10):

LED Pattern (Batt):

## 6.0 Setting up SNMP on InformaCast

To use the buttons with InformaCast, an SNMP trap must be set up on the server. This allows the buttons to communicate with the server when they are pressed. This utilizes the M2M (Machine to Machine) plugin on InformaCast.

*Note: It is recommended to have already set up IP Speaker groups to receive the messages triggered by the buttons.*

*Note: Since the M2M Contact Closures require the IP Address of the button to function as expected it is recommended to set up the button with either a Static IP Address or a DHCP Address reservation.*

## 6.1 Creating the M2M relay

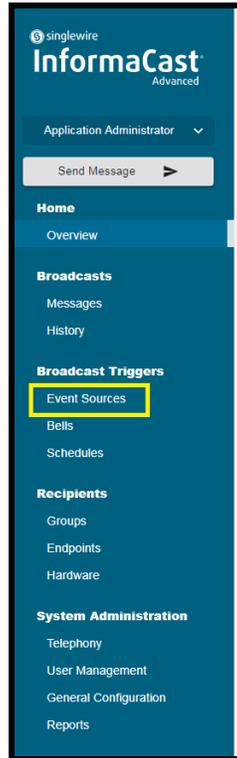
1. Navigate to the InformaCast server and log into InformaCast.

**Figure 6-1.** InformaCast Login Page



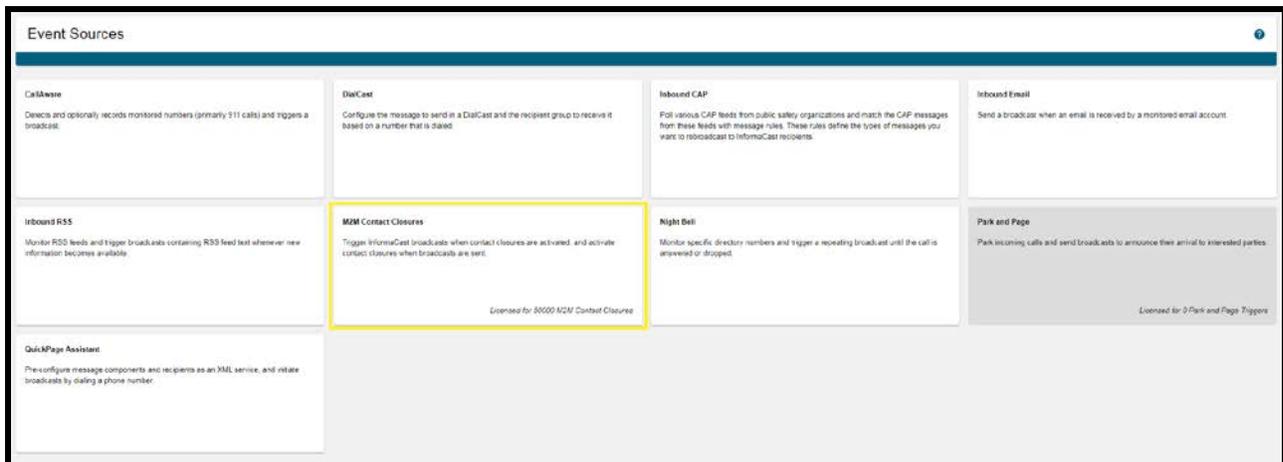
2. Go to the Event Sources in the Broadcast Triggers section.

Figure 6-2: Navigation Page



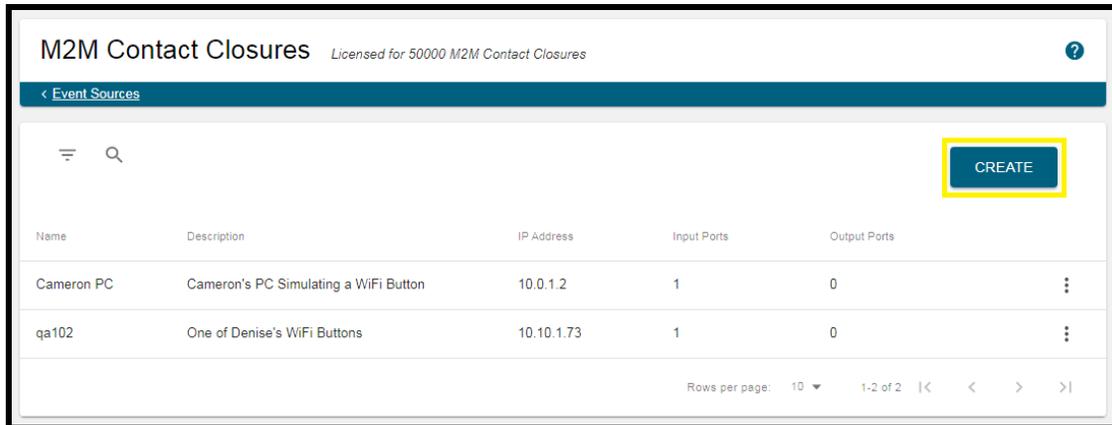
3. On the Event Sources page click on **M2M Contact Closures**.

Figure 6-3: Event Sources



4. On the M2M Contact Closure page press **Create**.

**Figure 6-4: M2M Relay Contact Closure**



M2M Contact Closures Licensed for 50000 M2M Contact Closures

< Event Sources

CREATE

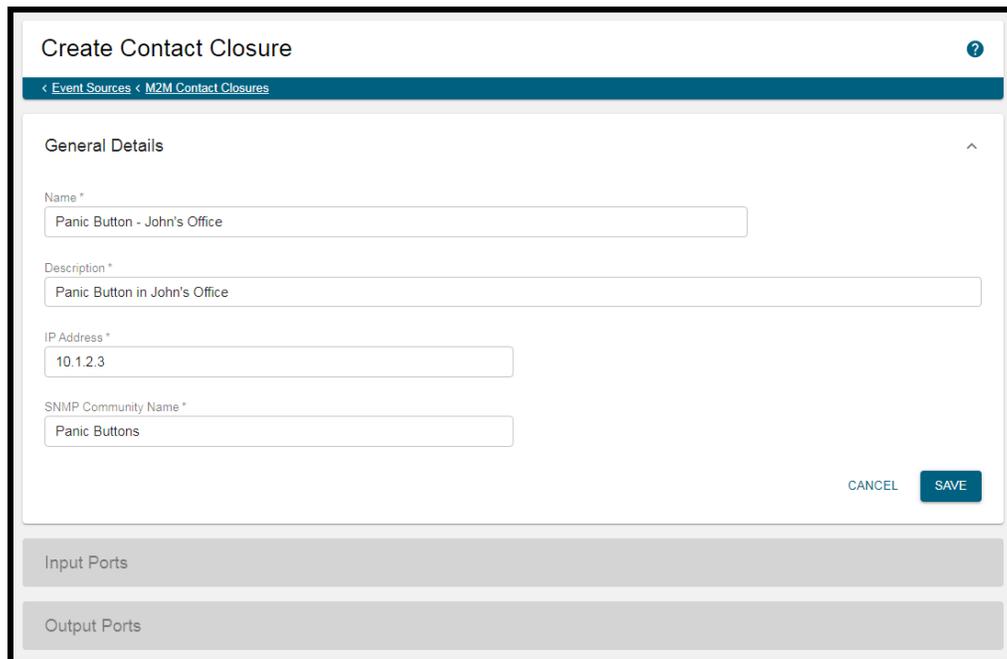
Name	Description	IP Address	Input Ports	Output Ports	
Cameron PC	Cameron's PC Simulating a WiFi Button	10.0.1.2	1	0	⋮
qa102	One of Denise's WiFi Buttons	10.10.1.73	1	0	⋮

Rows per page: 10 1-2 of 2 < > >>

5. Set the **Name**, **Description**, **IP Address** (of the button) and **SNMP Community Name**. Press **Save** to create the contact closure.

*Note: Since the M2M Contact Closures require the IP Address of the button to function as expected it is recommended to set up the button with either a Static IP Address or a DHCP Address reservation.*

**Figure 6-5: Create Contact Closure**



Create Contact Closure

< Event Sources < M2M Contact Closures

General Details

Name \*

Panic Button - John's Office

Description \*

Panic Button in John's Office

IP Address \*

10.1.2.3

SNMP Community Name \*

Panic Buttons

CANCEL SAVE

Input Ports

Output Ports

6. Press **Create** to make an Input Port for the SNMP messages from the button.

**Figure 6-6:** Edit Contact Closure.

7. Set the **Name**, **Port Identifier (OID)**, **Port Switch**, **Message**, and **Recipient Groups**.

*Note: The CyberData OID is 1.3.6.1.4.1.45953.1.1.2.1.2.201*

**Figure 6-7:** Create Input Port

The WiFi button is now ready to be used. CyberData recommends testing the button to ensure that the message is set correctly and plays to the correct group.

## 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.

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