CyberData
The IP Endpoint Company

Zoom Configuration Guide: SIP Strobe

Document Part # 931710E

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Revision Information

- 9-27-19 Initial Release
- 1-31-20 Updated Device Type creation.
- 3-11-21 Updated for Zoom phone security update
- 9-20-21 Updated for new Zoom provisioning process
- 1-12-23 Update for Primary and Nightringer Extension usage.

Table of Contents

1.0 Test Setup Equipment

This section describes the products configured following this document

Table 1-1: Setup Equipment

EQUIPMENT	MODEL or PART NUMBER	FIRMWARE VERSION
CYBERDATA SIP STROBE	011376	20.2.0 or later
CYBERDATA OUTDOOR SIP STROBE	011479	20.2.0 or later

2.0 Before You Start

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

Network Advisories

Zoom uses a Fully Qualified Domain Name (FQDN) for the SIP server and Outbound Proxy addresses. The CyberData SIP Strobe needs to perform a DNS A query to resolve the IP address of Zoom's Outbound Proxy FQDN. It is necessary to ensure the configured DNS server(s) have an A record for the Outbound Proxy address.

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

- TCP 5060-5061, 5091 (SIP)
- UDP 10500 (RTP)

The strobe will need to traverse the public internet in order to operate with Zoom in the cloud.

The strobe's paging extension uses SIP port 5060 to receive SIP messages. The Nightringer extension uses SIP port 5061 to receive SIP messages. Both extensions will send SIP messages to port 5091, the port used by Zoom's Outbound Proxy.

SIP ports 5060-5061 and RTP port 10500 are the default values on all noted firmware levels.

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

The RTP port setting on the **SIP** page is used for both extensions.

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 intercom's product webpage:
CyberData SIP RGB (Multi-Color) Strobe (011376)
https://www.cyberdata.net/collections/sip/products/011376

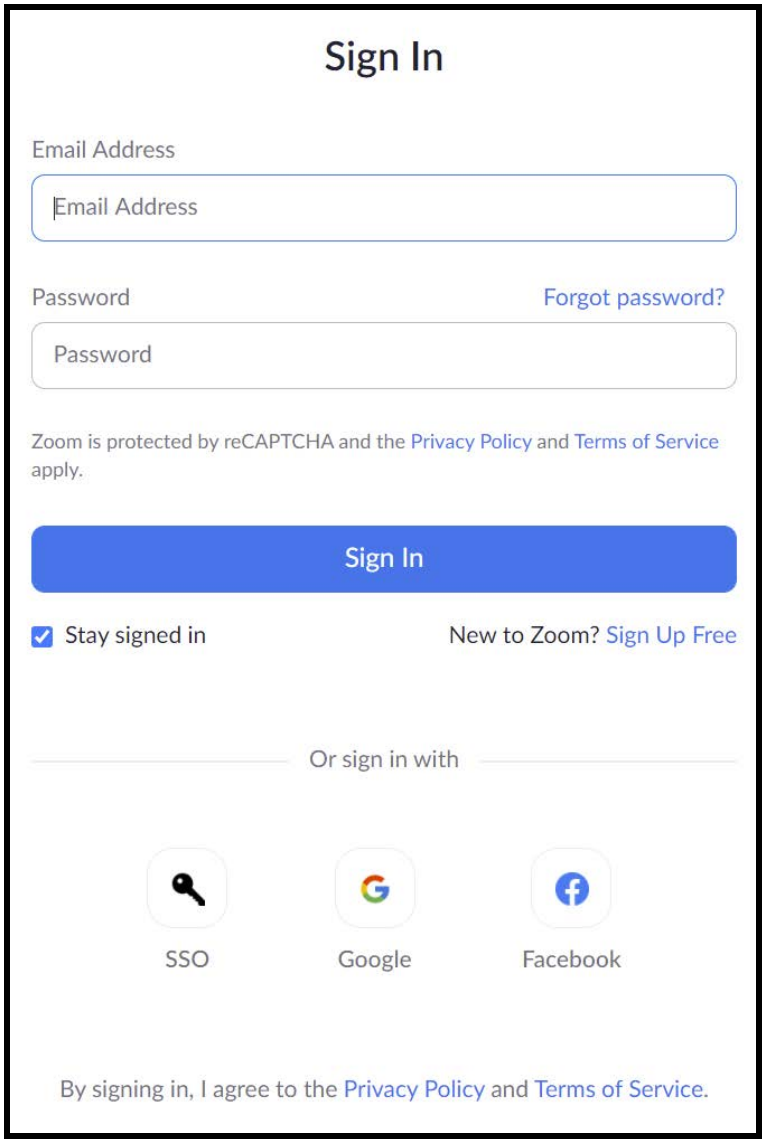
CyberData SIP Outdoor RGB (Multi-Color) Strobe (011479)
https://www.cyberdata.net/collections/sip/products/011479

3.0 Configuration Procedure: Intercom/Paging Device

There are several different extension types that can be used on the Zoom platform. This guide provides instructions to register the CyberData SIP Strobe as an Intercom/Paging Device. See Zoom documentation for more details.

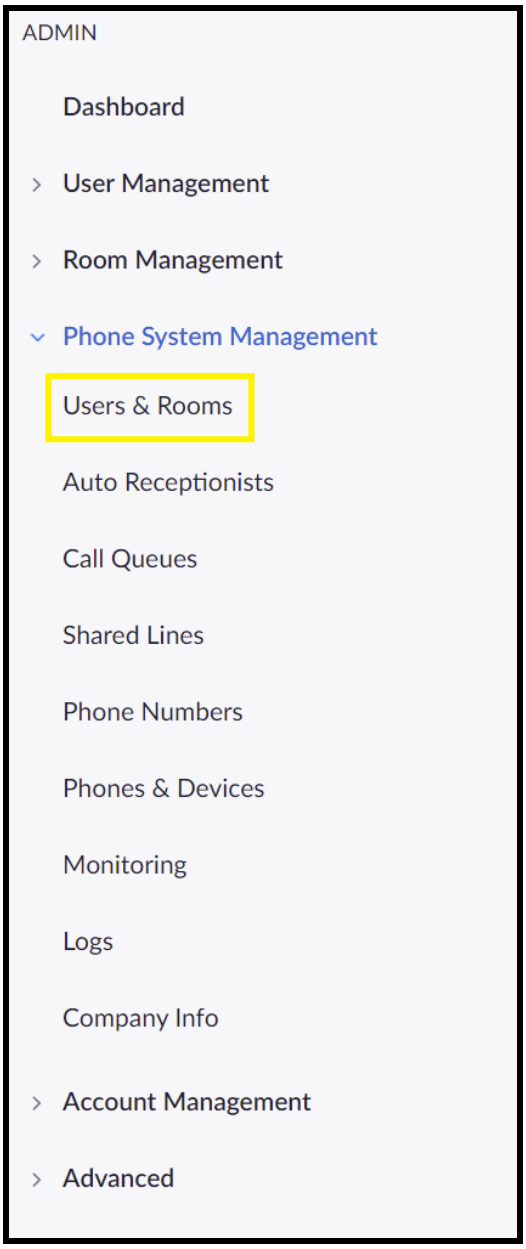
1. Log into Zoom. https://zoom.us/signin

Figure 3-1: Log into Zoom



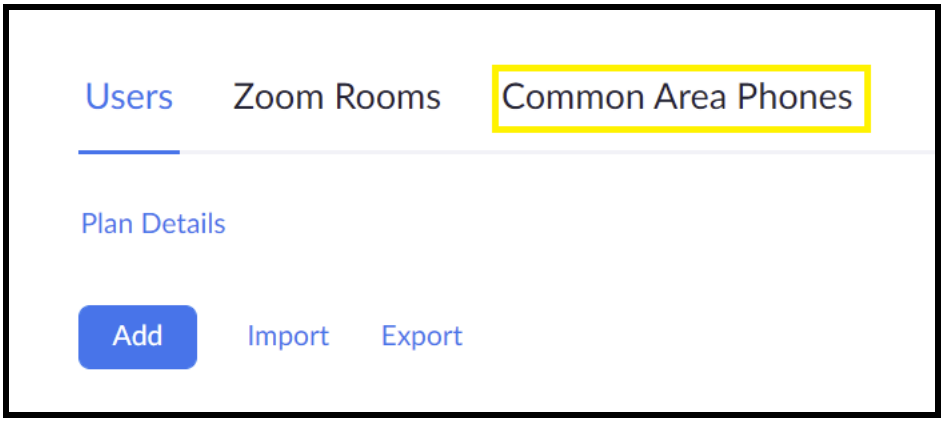
2. From the Profile page select the “Phone System Management” section and the ‘Users & Rooms’ subsection.

Figure 3-2: Profile Landing Page



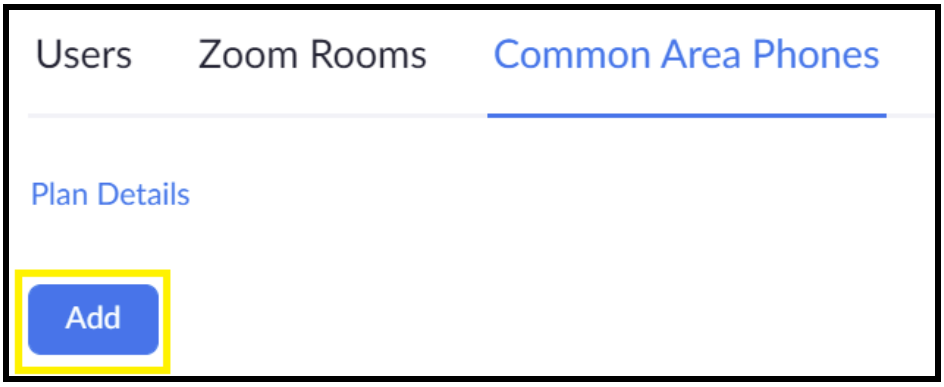
3. From “Users & Rooms” navigate to the Common Area Phones tab.

Figure 3-3: Users & Rooms



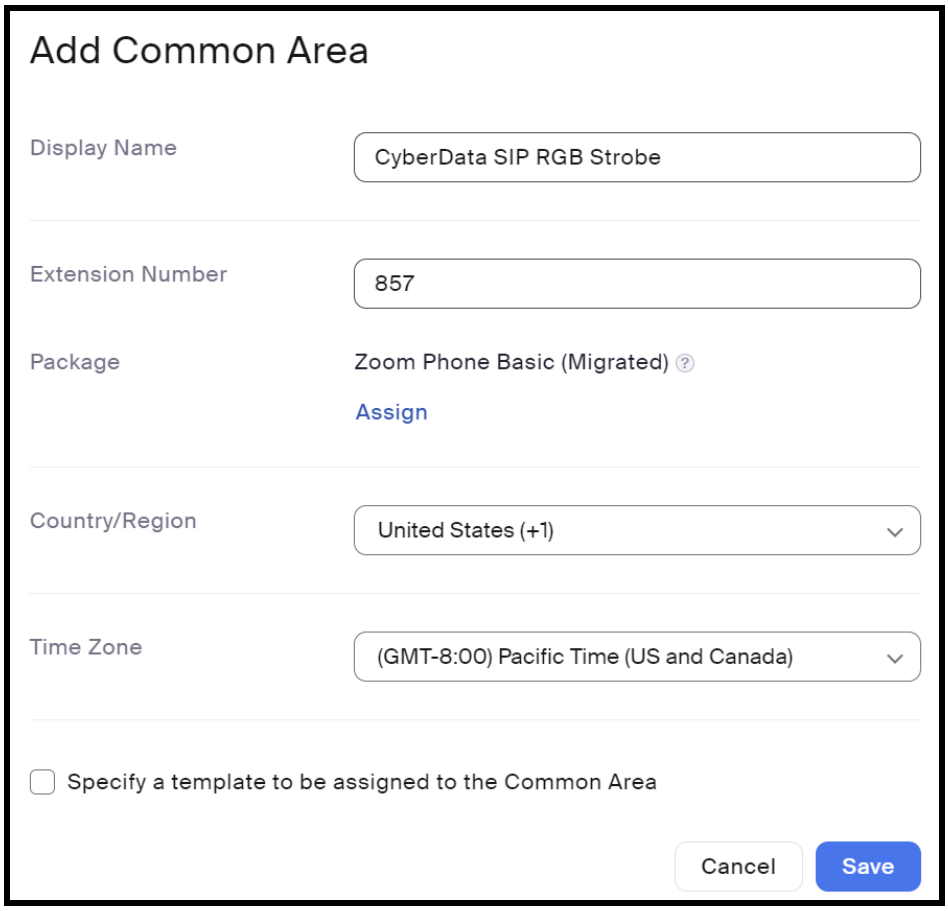
4. Press the Add button on the Common Area Phones Tab.

Figure 3-4: Add Common Area Phone



5. After clicking on the Add button a Pop-up will appear that allows common area phone creation.

Figure 3-5: Add Common Area Phone Pop-up

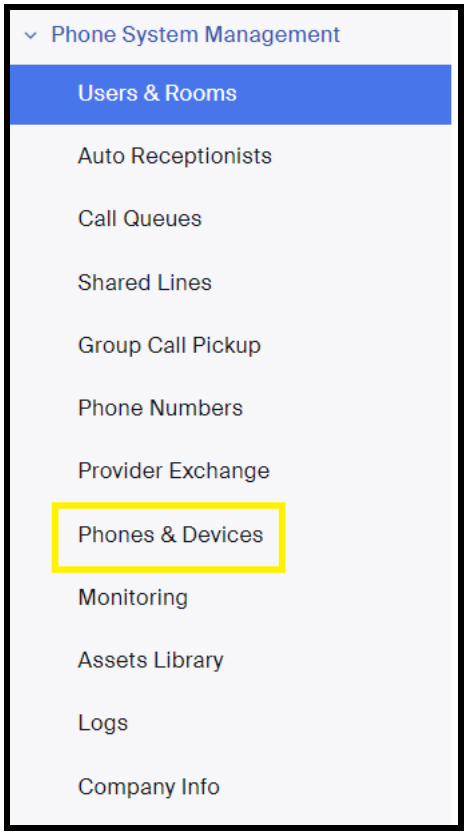


6. Set the **Display Name** to the name of the intercom.
7. Adjust the **Extension Number** as necessary.
8. Select the desired **Package**.
9. Adjust the **Country/Region** as necessary
10. Adjust the Time Zone if required.
11. Press **Save**.

After creating the common area phone, a device will need to be created to add or associate with the common area phone.

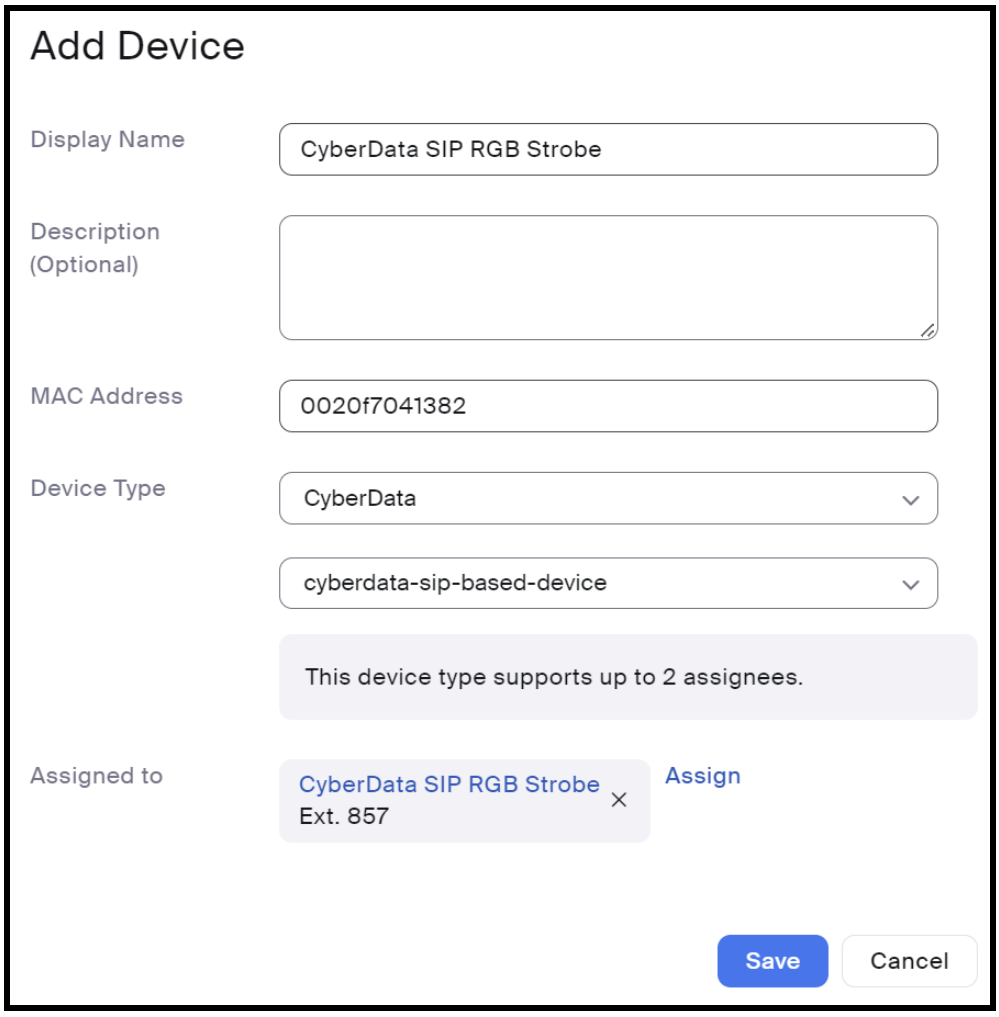
12. From the side tool bar select **Phones & Devices**.

Figure 3-6: Phones & Devices



13. From the Phones & Devices page press the **Add** button to create a new phone.

Figure 3-7: Add Device



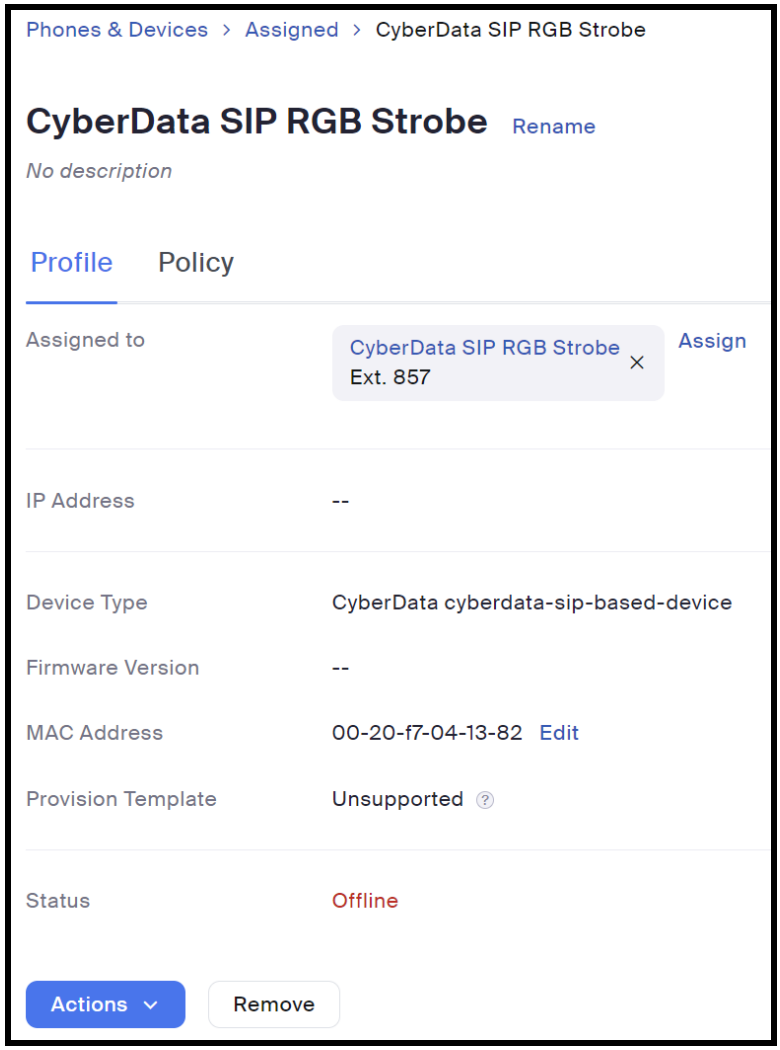
14. Set the **Display Name**.
15. Set an optional **Description**.
16. Set the **MAC Address** to that of the device

Setting the MAC address should automatically select CyberData as the device type

17. Set the device to “cyberdata-sip-based-device”
18. Search for and find the Common Area Phone created in the previous step
19. Press **Save**.

20. The page will refresh, and the device will have been created. Press the **Actions** button and select **Provision**.

Figure 3-8: Device Created



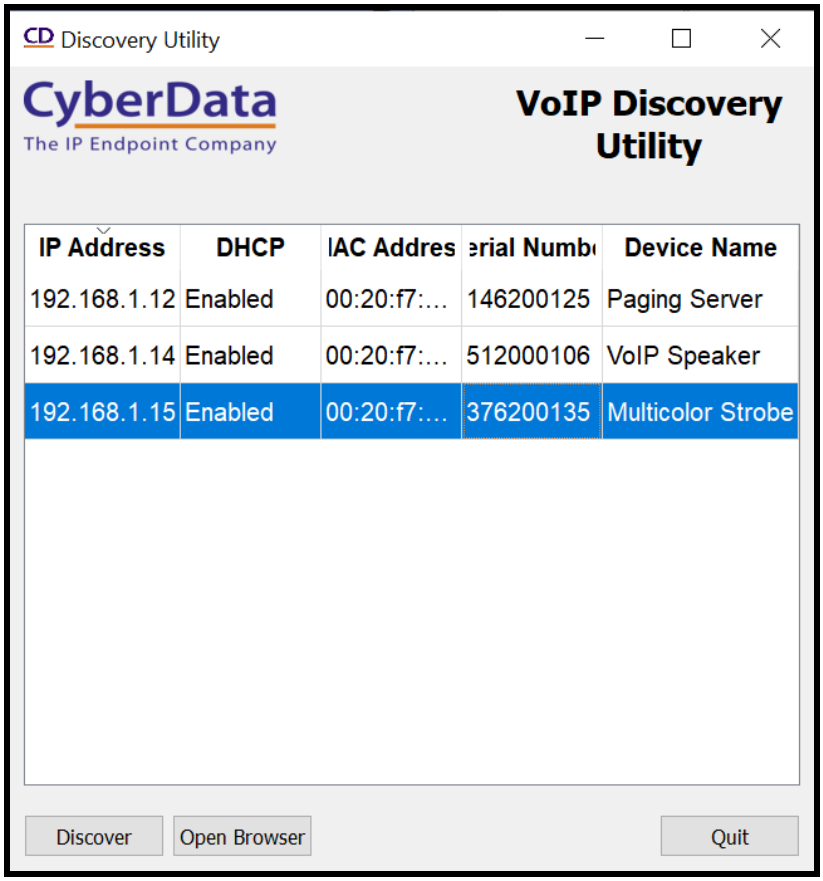
21. In the provisioning pop-up click the **Copy to Clipboard** button to copy the provisioning URL.

4.0 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.

1. Click **Open 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.

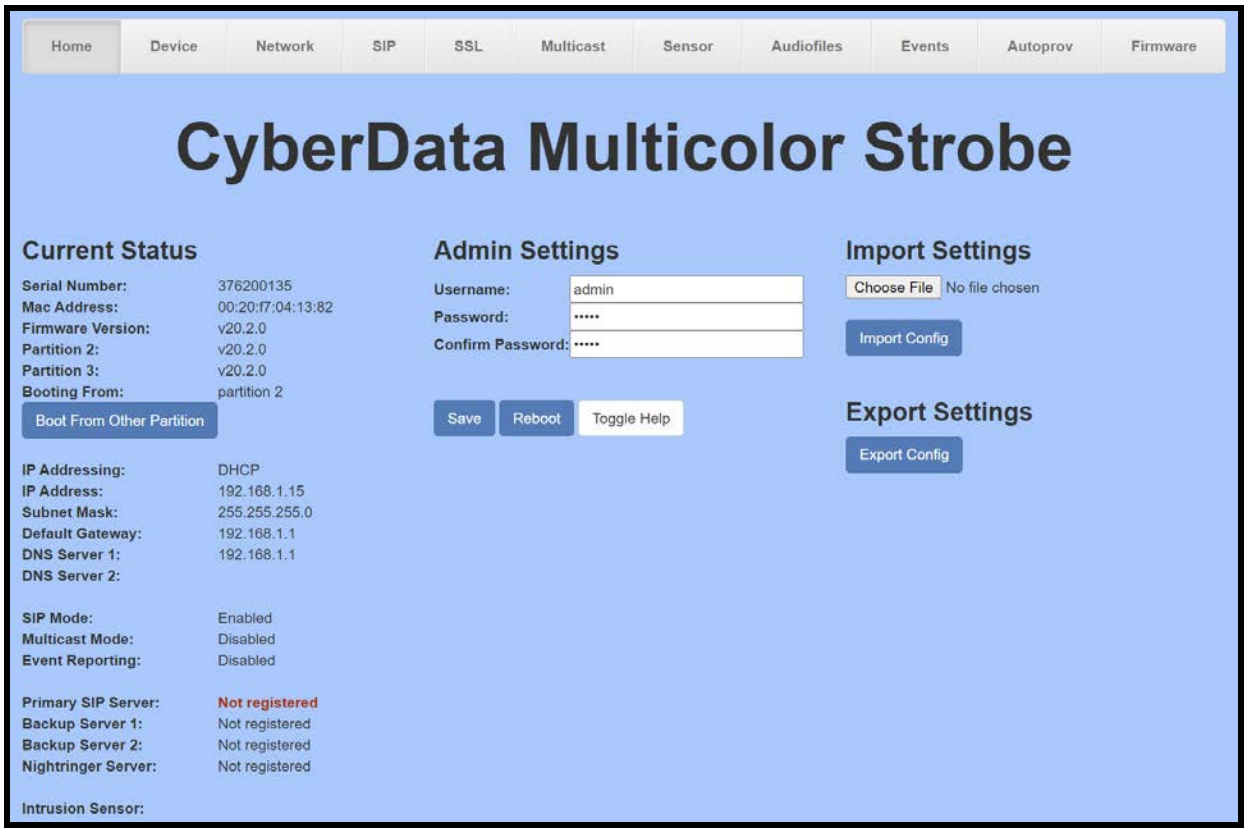
Figure 4-1: CyberData Discovery Utility



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

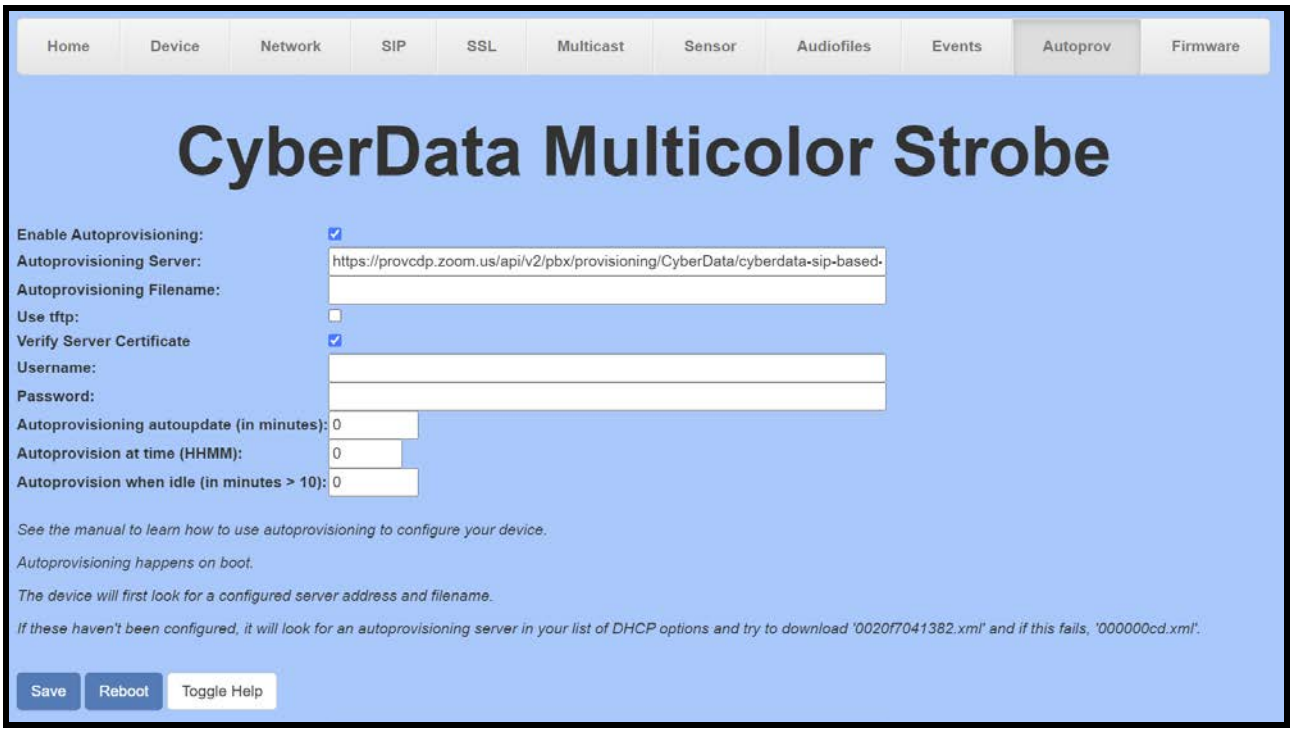
Username: admin
Password: admin

Figure 4-2: Web Interface Login



3. From the Home tab navigate to the 'Autoprov' Tab.

Figure 4-3: Autoprov tab



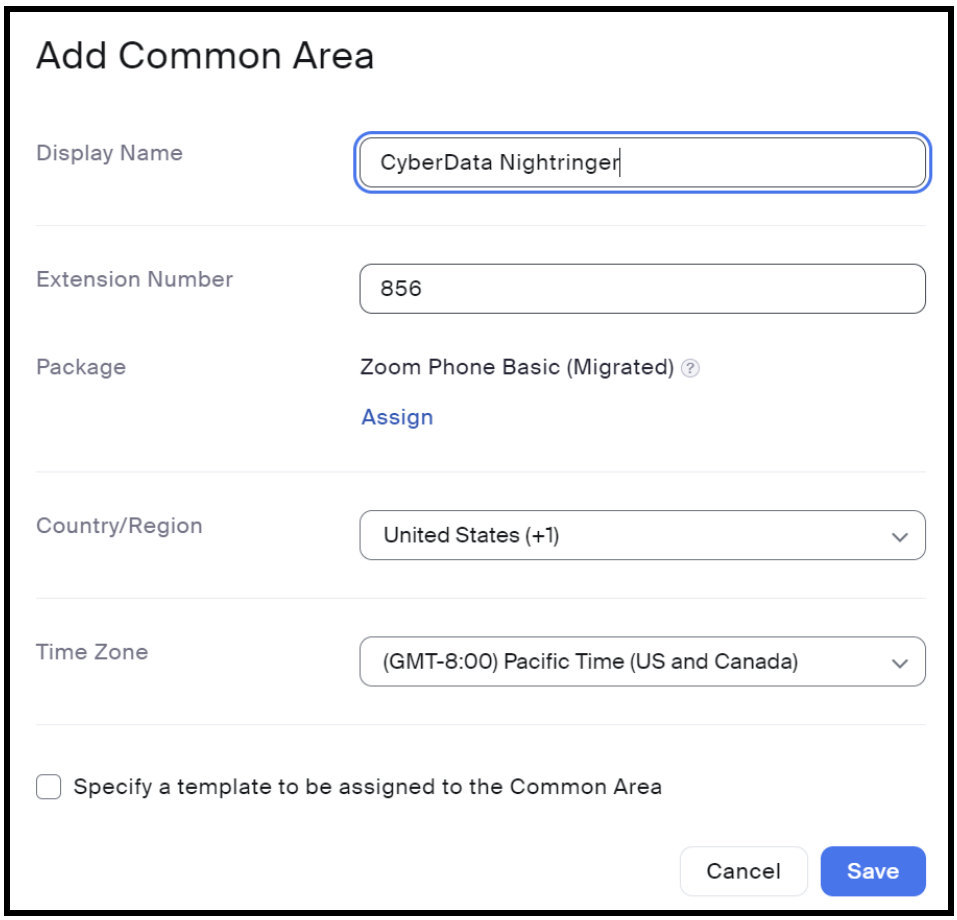
4. Paste the link copied from the provisioning popup to the **Autoprovisioning Server** field.
5. Check the box **Verify Server Certificate**.
6. Save
7. Reboot.

4.1 Adding Nightringer

CyberData products have a second extension called “Nightringer” that when called the device will ring. This makes the Nightringer extension perfect for use in ring groups. This is easy to add in a Zoom environment.

1. After logging into Zoom a new common area phone will need to be created that will correspond with the Nightringer Extension.
2. From Phone System Management select Users & Rooms and then Common Areas. Finally Press **Add** to create a new Common Area Phone.

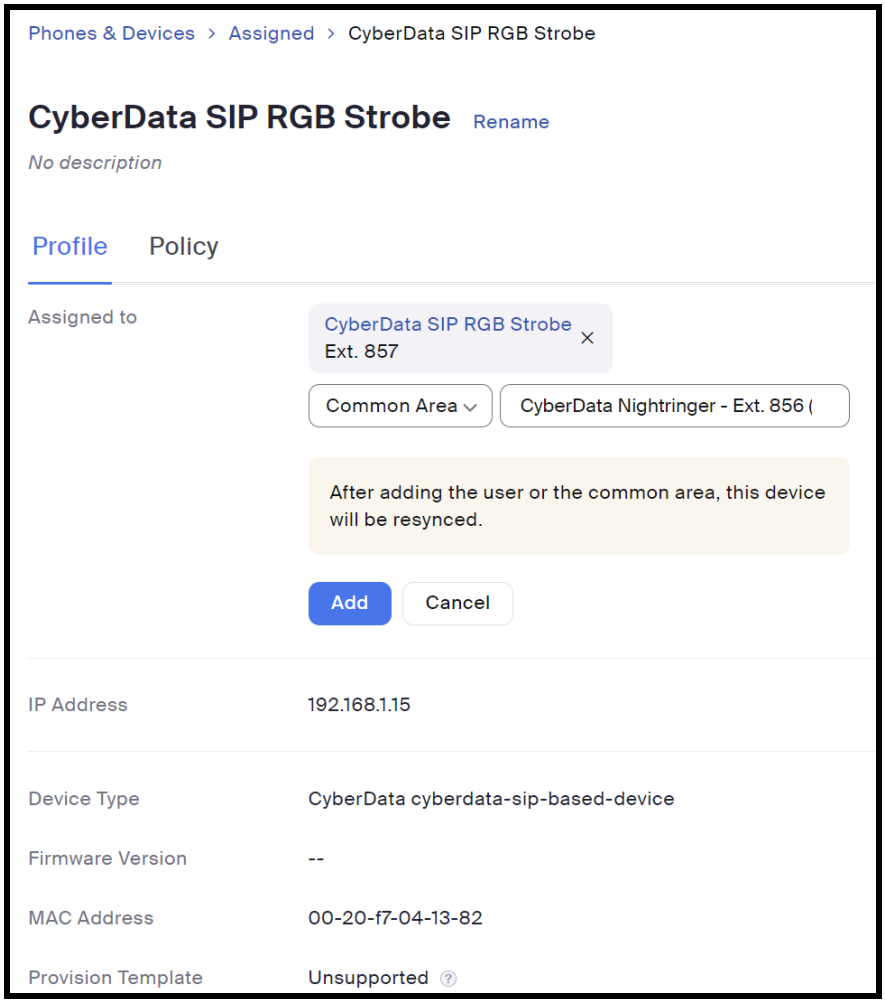
Figure 4-4: Add Nightringer



3. Once configured press **Save** to create the common area phone.
4. After creating the phone navigate to Phones & Devices and select the device where the Nightringer extension will be configured.
5. After selecting the device press **Assign** in the ‘Assigned to’ section.

6. Change the User selection to **Common Area** then find the newly created Nightringer Common Area Phone.
7. Press **Add** to add the second extension

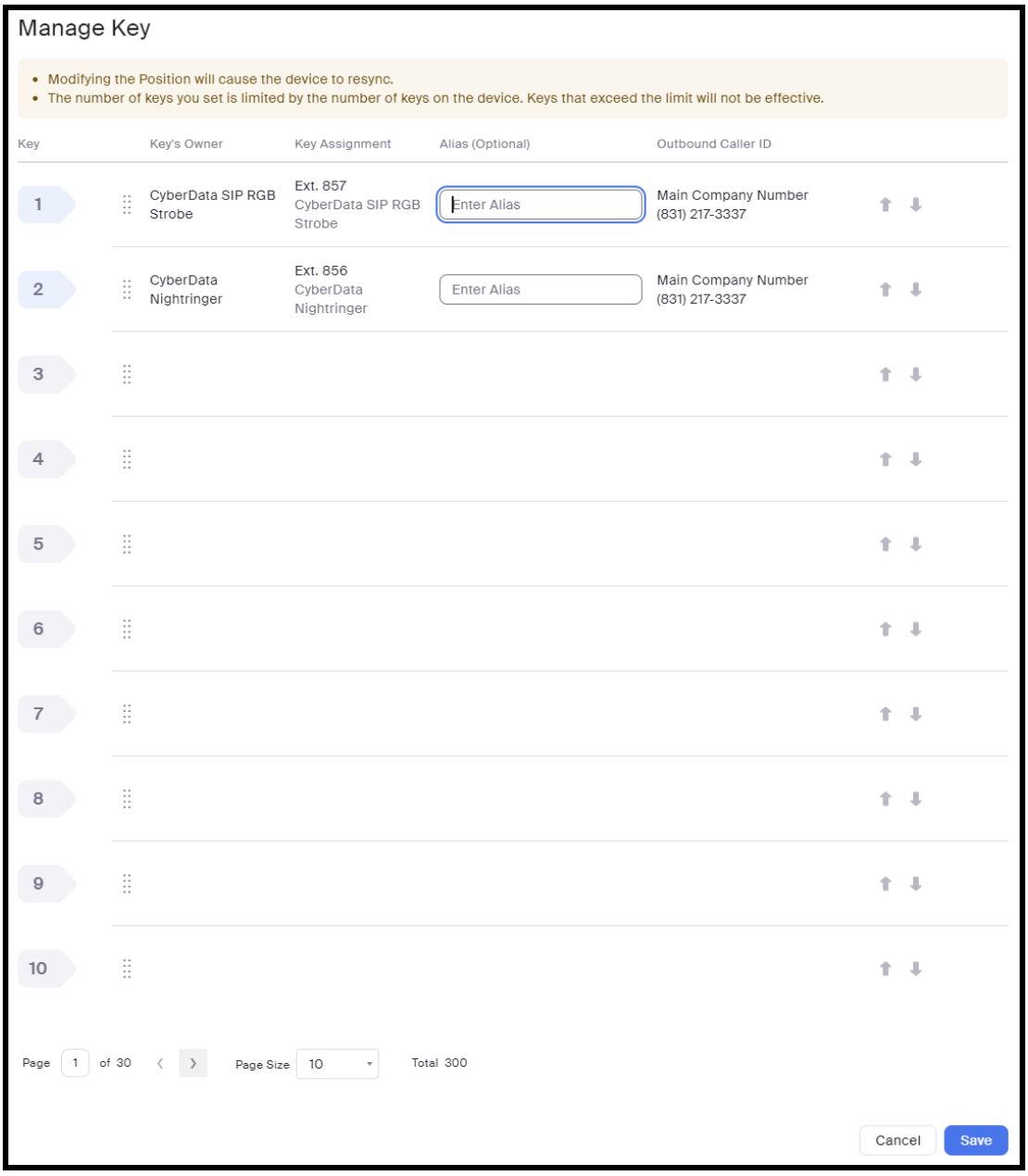
Figure 4-5: Assigning Nightringer



Note: *After adding the Nightringer Extension Zoom should have the device Resync its config file and this will have the device reboot. It is possible that when the new extension is created it will be assigned to the Primary Extension. Confirm the Nightringer extension is assigned to the correct line key. Line Key 1 is for the Primary Extension and Line Key 2 is for the Nightringer Extension.*

8. To reassign the extensions, select Keys & Positions, then press Manage Key.
9. Drag and drop the extensions to the correct Key positions. Key 1 for Primary Extension and Key 2 for Nightringer Extension.
10. Save to confirm the change.

Figure 4-6: Key Positions



5.0 Using the CyberData Strobe in a Zoom system.

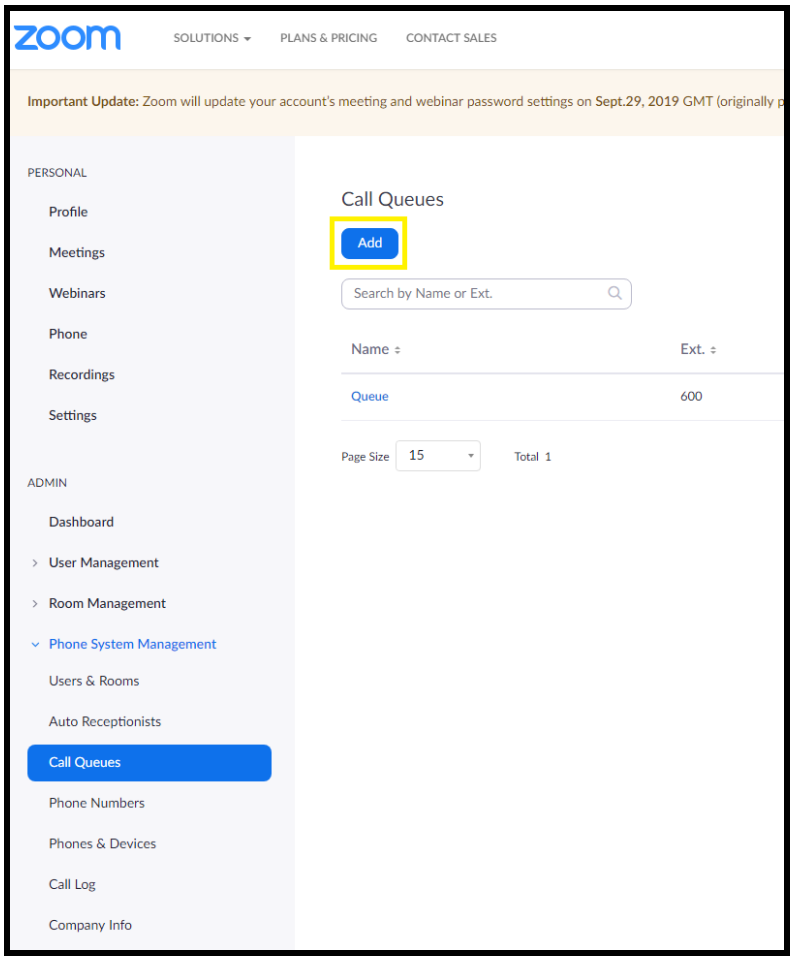
CyberData SIP Strobe's are used for visual notification. The strobe can be directly called or added to a ring group/call queue. When the strobe receives a call, it will blink in accordance to the color and 'scene' that was picked for that operation.

5.1 Creating a Call queue

CyberData recommends using the Nightringer extension as part of a call queue, allowing the amplifier to also serve as an additional notification for incoming calls.

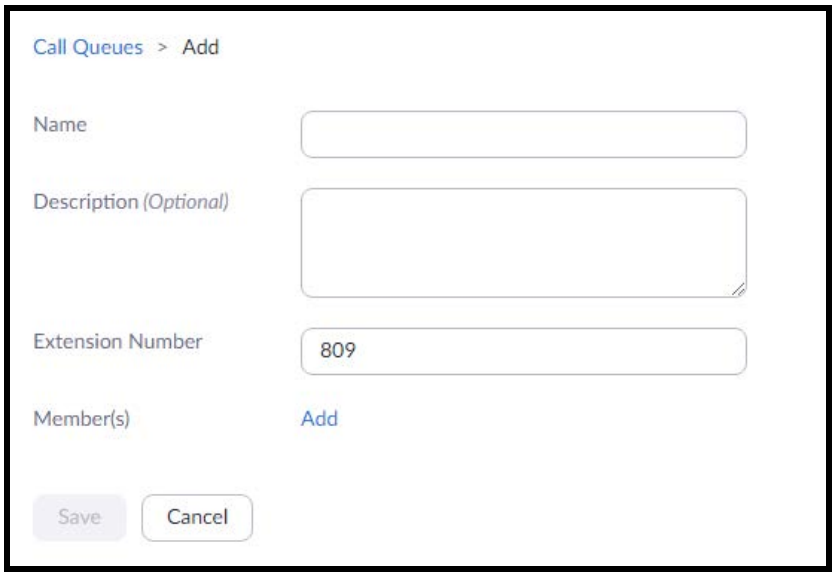
1. From the Phone System Management page select call queues and press the Add button to create a new queue.

Figure 5-1: Add call queue



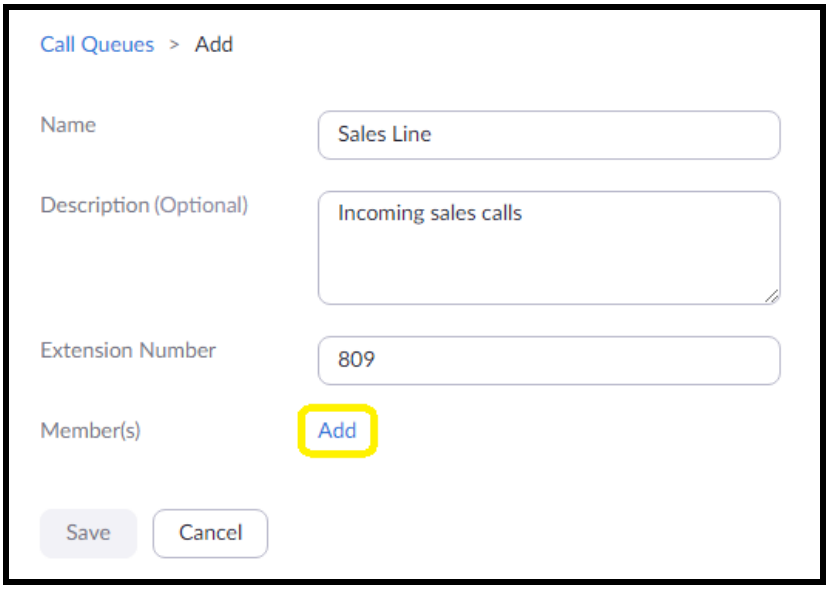
2. After clicking 'Add' a pop-up will appear that allows naming and assigning a number to the call queue.

Figure 5-2: Name the queue



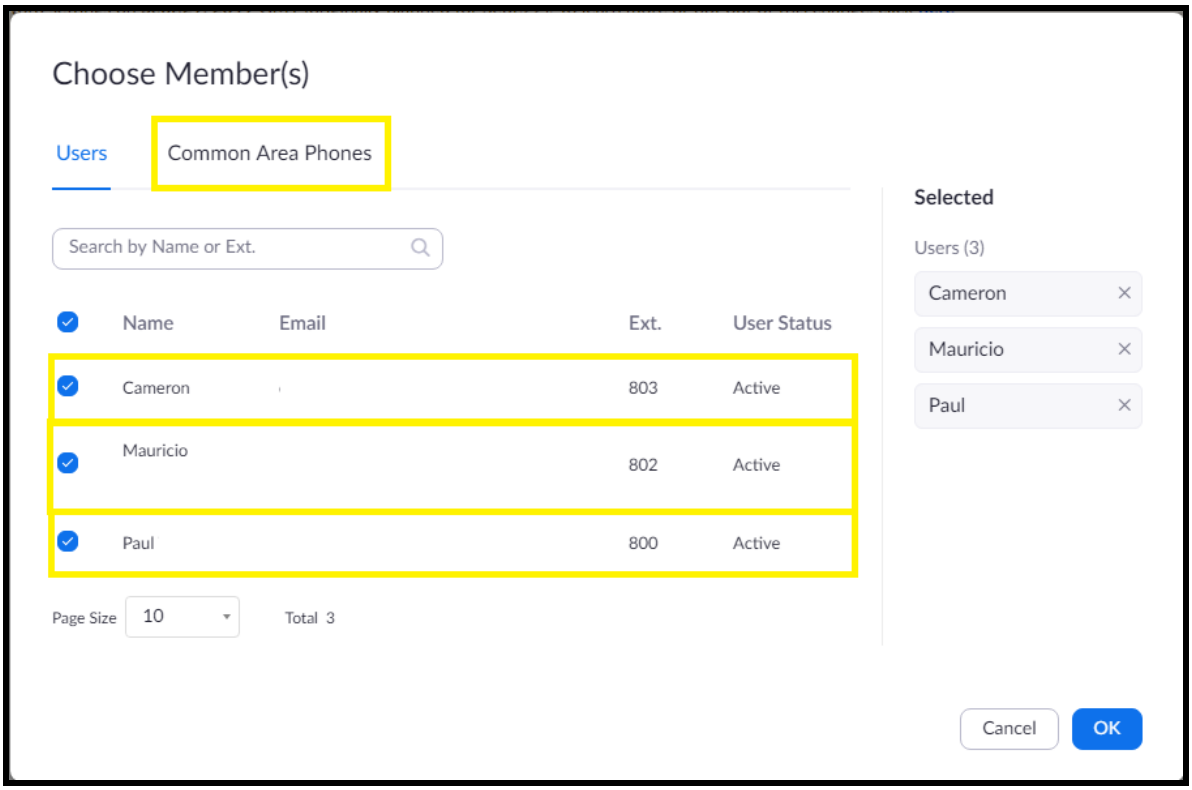
3. Name the queue, set a description and change the extension number if necessary.

Figure 5-3: Add users



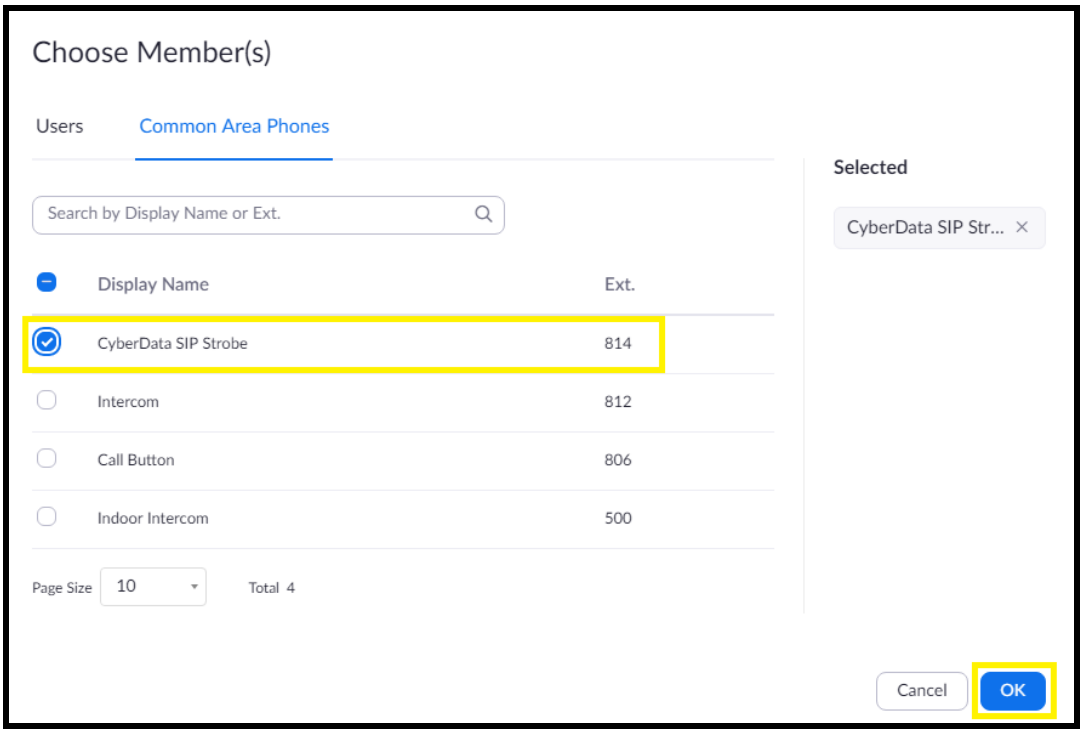
4. Press the Add button to add Users and Common Area Phones to the queue.

Figure 5-4: Add Users



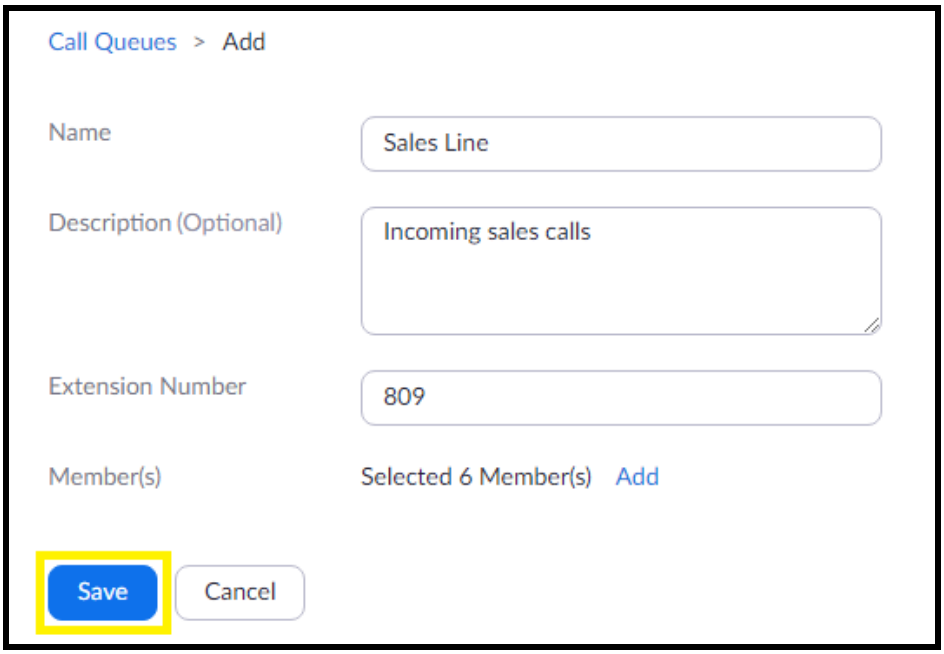
5. Select the users who will participate in the call group, then select "Common Area Phones."
6. In the "Common Area Phones" section, select the phones you wish to add to the queue.

Figure 5-5: Add Common Area Phones



7. Click "OK" to confirm your selections.
8. Finally, press 'Save' to complete the queue.

Figure 5-6: Call queue complete



5.2 Setting the Blink Scenes

The strobe can illuminate differently depending on what extension is called and what state the call is in. Both color and scene are configurable for each of the different possible options.

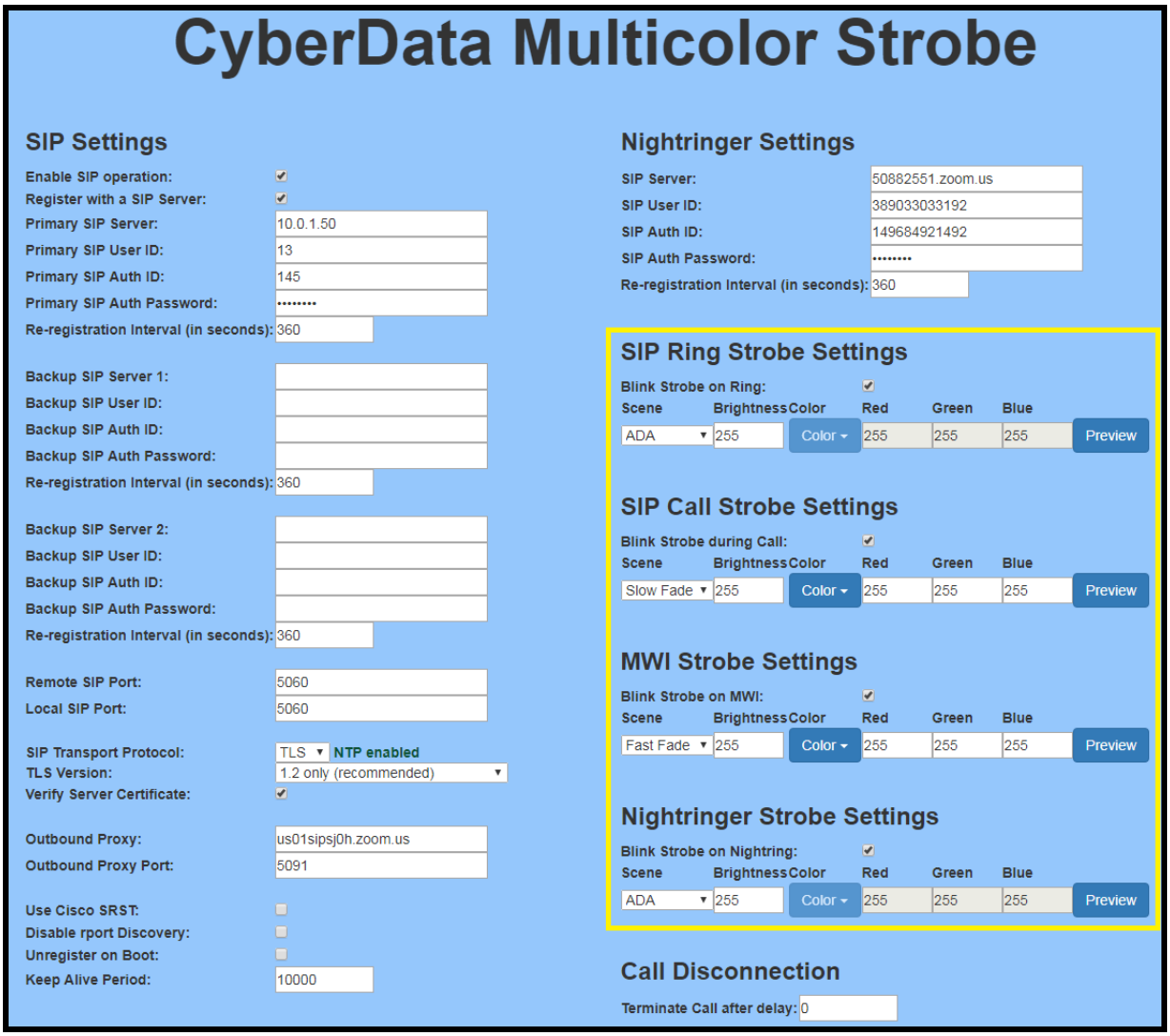
Blink Scene types:

- **ADA**
  - Fast blink in White to comply with ADA standards
- **Slow Fade**
  - Full brightness that slowly fades in intensity
- **Fast Fade**
  - Full brightness that fades quickly in intensity
- **Slow Blink**
  - Full brightness that slowly blinks
- **Fast Blink**
  - Full brightness that blinks quickly
- **Off**

Strobe Settings

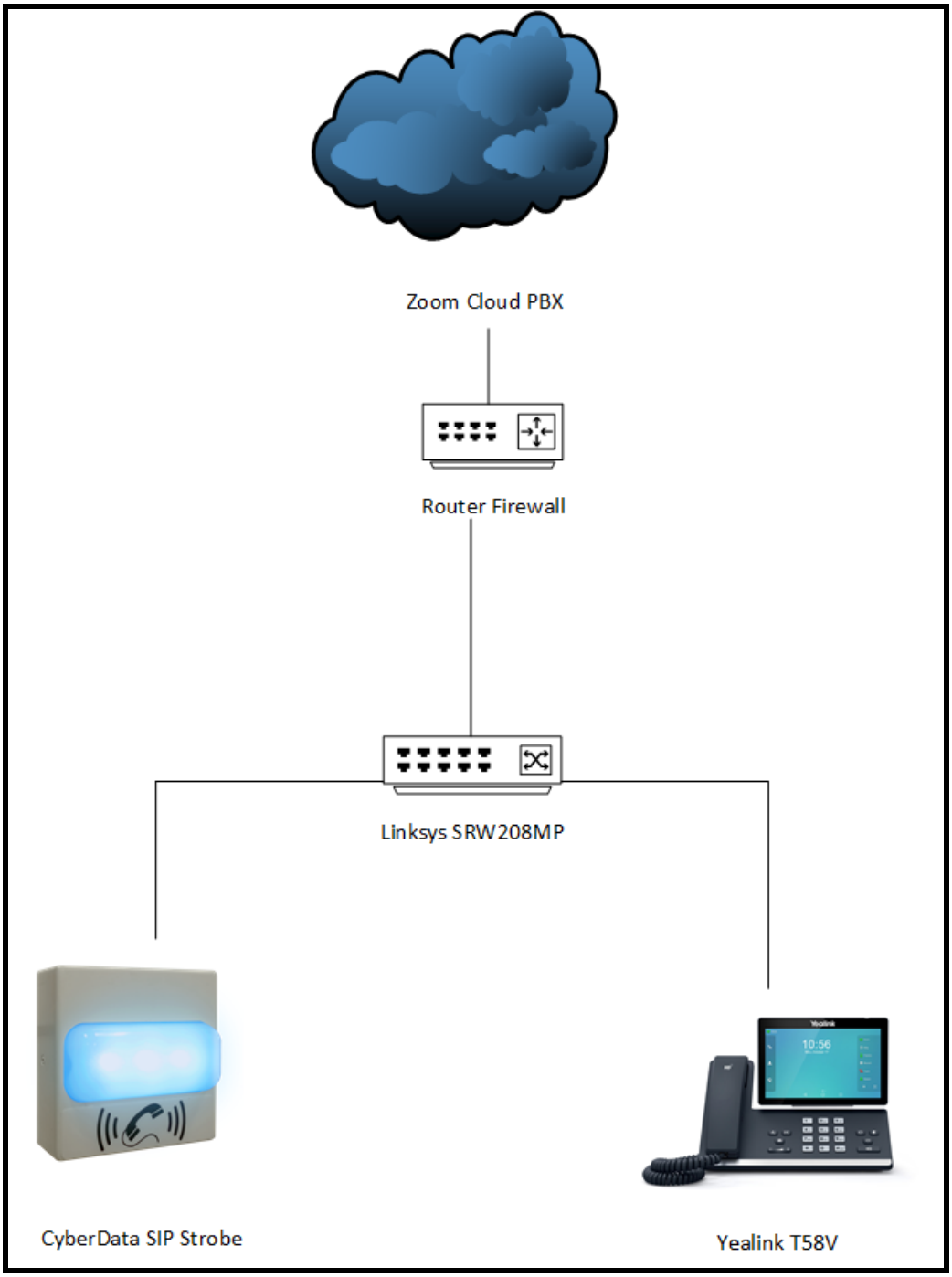
- **SIP Ring Strobe Settings**
  - How the strobe will blink when the paging extension is called.
- **SIP Call Strobe Settings**
  - How the strobe will blink when the strobe makes an outbound call.
- **MWI Strobe Settings**
  - How the strobe will blink when a voice mail is left for the extension of the strobe.
- **Nightringer Strobe Settings**
  - How the strobe will blink when the Nightringer extension rings.

Figure 5-7: SIP Strobe Settings



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