CyberData
The IP Endpoint Company

Blueface Configuration Guide: SIP Paging Server

Document Part # 931914B

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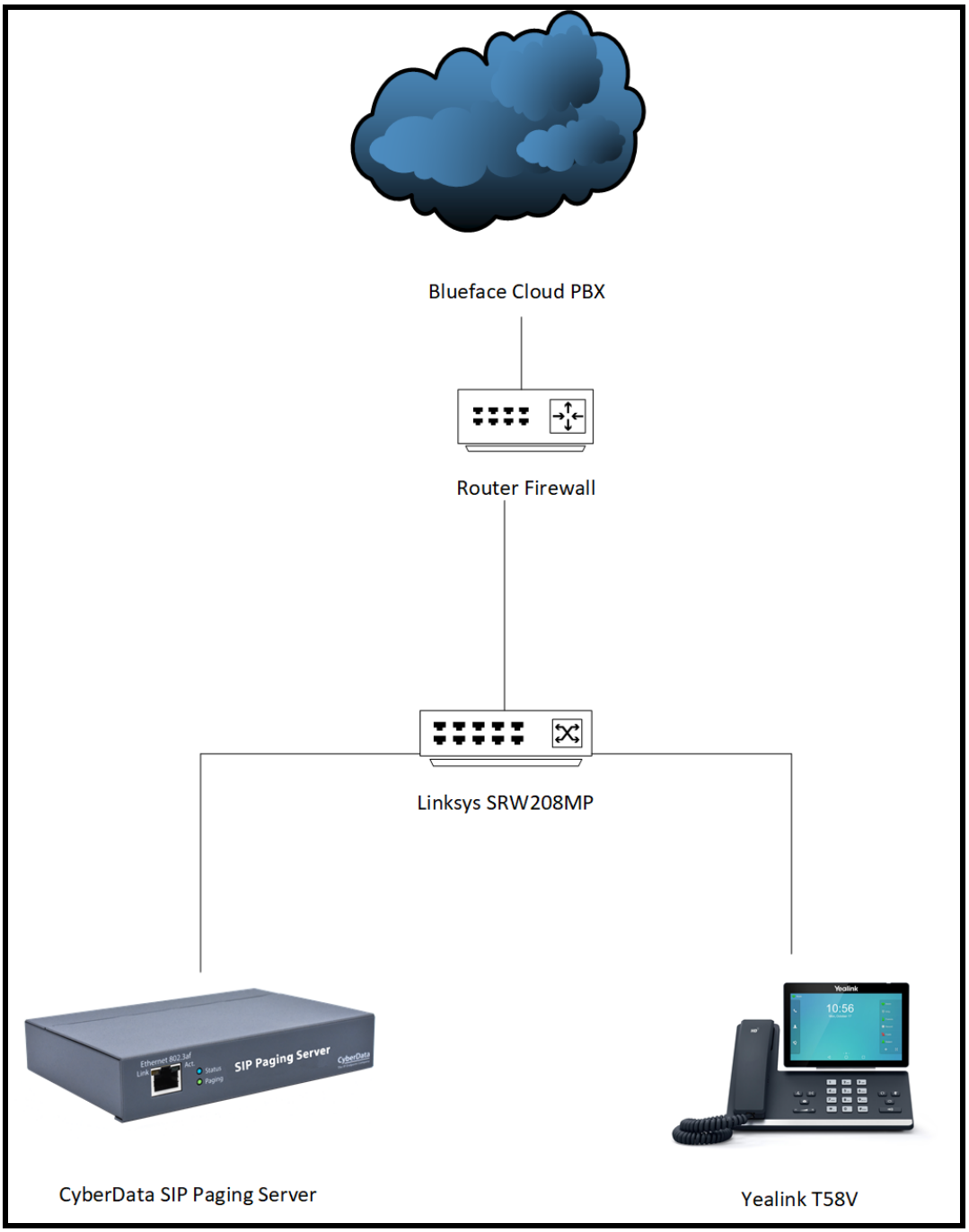
Table of Contents

Table of Contents 3
1.0 Setup Diagram 4
2.0 Test Setup Equipment 5
3.0 Before You Start 6
4.0 Configuration Procedure: Callflow Setup 8
5.0 Configuration Procedure: Setting up the Paging Extension 13
5.1 Configuration Procedure: Setting up the Nightringer Extension 17
6.0 Using the CyberData SIP Paging Server 20
6.1 Setting up a page group 20
6.2 PGroup Setup 24
7.0 Contact CyberData Corporation 26

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 Blueface.

Table 2-1: Setup Equipment

EQUIPMENT	MODEL or PART NUMBER	FIRMWARE VERSION
CYBERDATA SIP PAGING SERVER	011146	20.1.0

3.0 Before You Start

This configuration guide documents the integration process of the CyberData SIP Paging Server.

Network Advisories

Blueface uses a Fully Qualified Domain Name (FQDN) for the SIP server address. The CyberData SIP Paging Server need to perform a DNS A query to resolve the IP address of Blueface'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 paging server to use:

- UDP 5062 (SIP)
- UDP 10500 (RTP)

The paging server will need to traverse the public internet in order to operate with Blueface in the cloud.

The paging server's paging extension uses SIP port 5060 to receive SIP messages. The device will send SIP messages to port 5062, the port used by Blueface's SIP Server.

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

Alternatively, SIP ports for the device 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 paging server's product webpage:

SIP Paging Server (011146):
https://files.cyberdata.net/assets/011146/011146_931803B_SIP_Paging_Server_Operations_Guide.pdf

4.0 Configuration Procedure: Callflow Setup

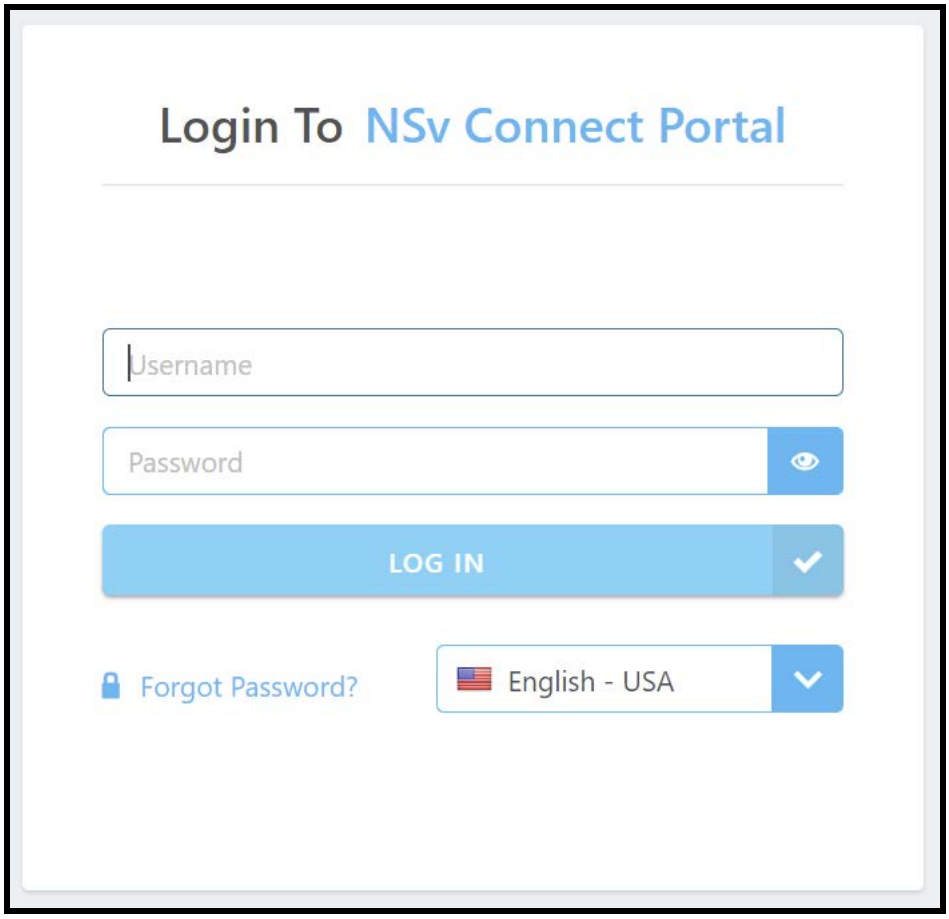
Blueface does not allow users to add their own devices to the platform. The MAC addresses of the devices must be provided to the account manager, who can then add the devices to the platform for you. An email will then be generated and sent to you that will contain the registration information for the CyberData device.

Blueface requires a callflow to be created to call or make a call from any device. This section will outline how to create the dial plan.

1. Log into Blueface.

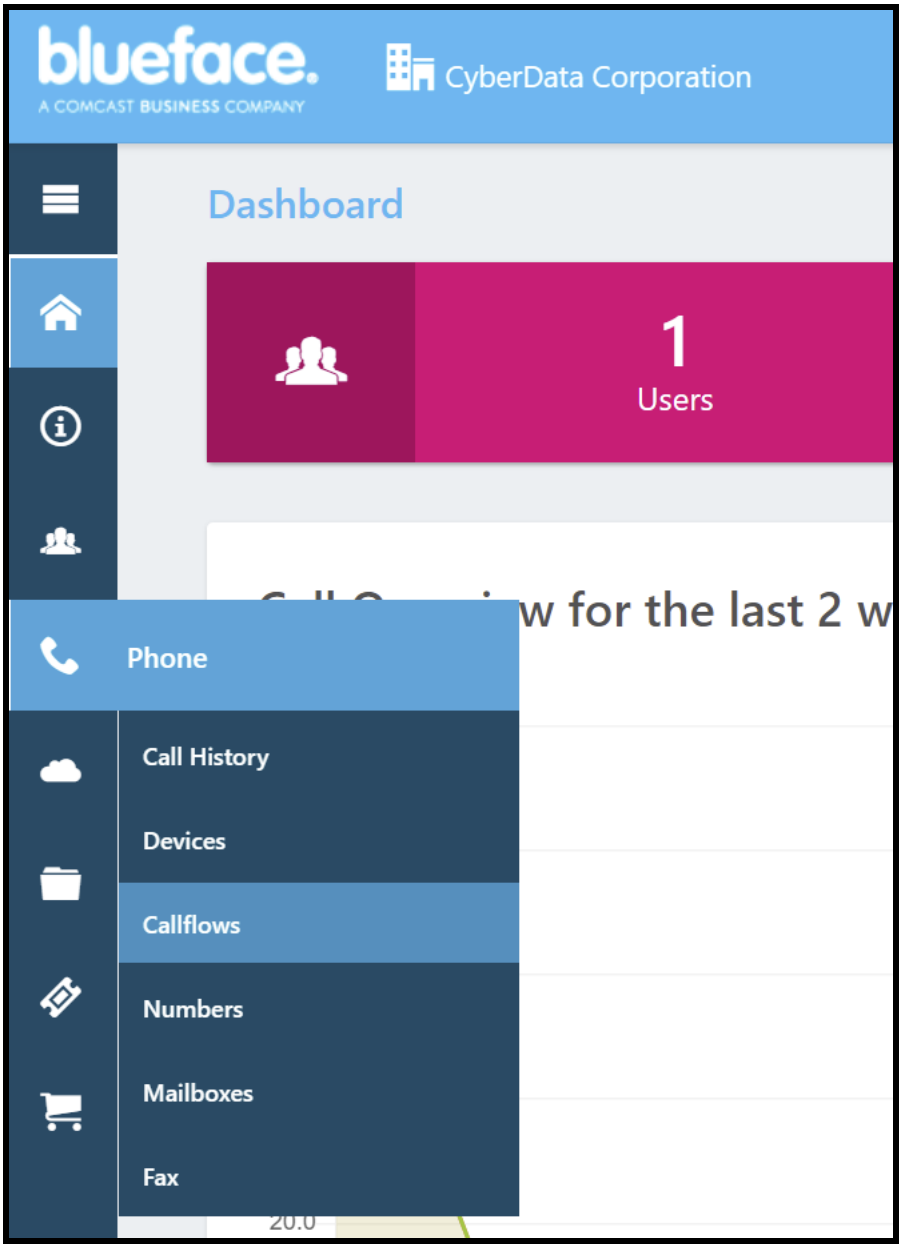
https://portal.nsvconnect.com/login

Figure 4-1: Login



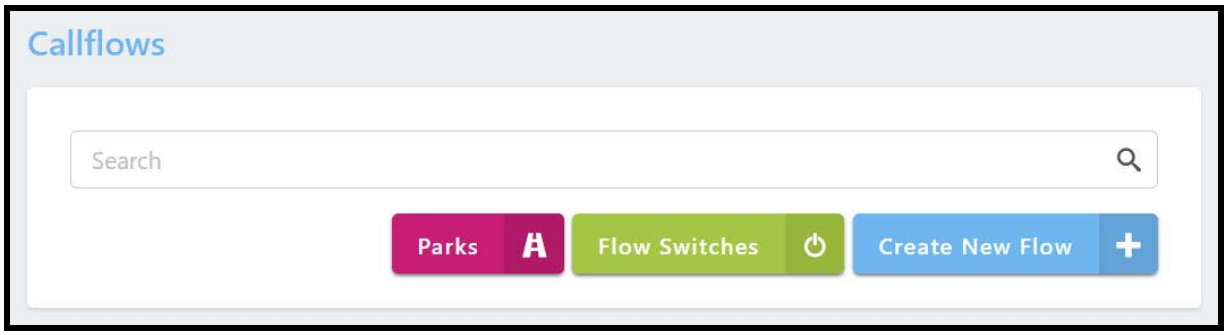
2. From the landing page **Phone** and then **callflows**.

Figure 4-2: Dashboard



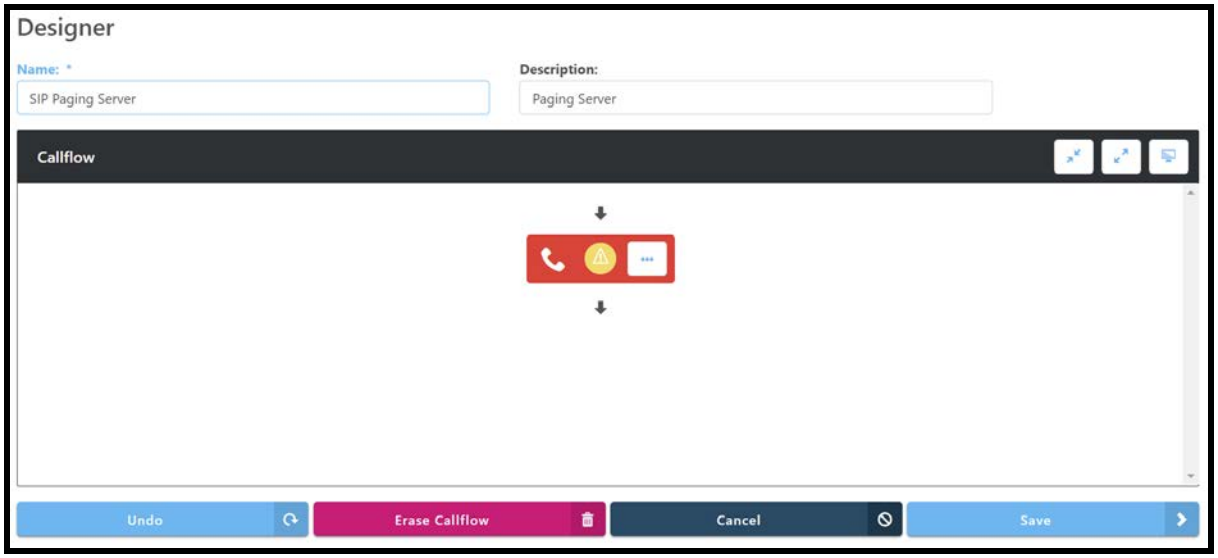
3. On the **Callflows** page press **Create New Flow.**

Figure 4-3: Callflow Page



4. Name the new callflow and set a description.

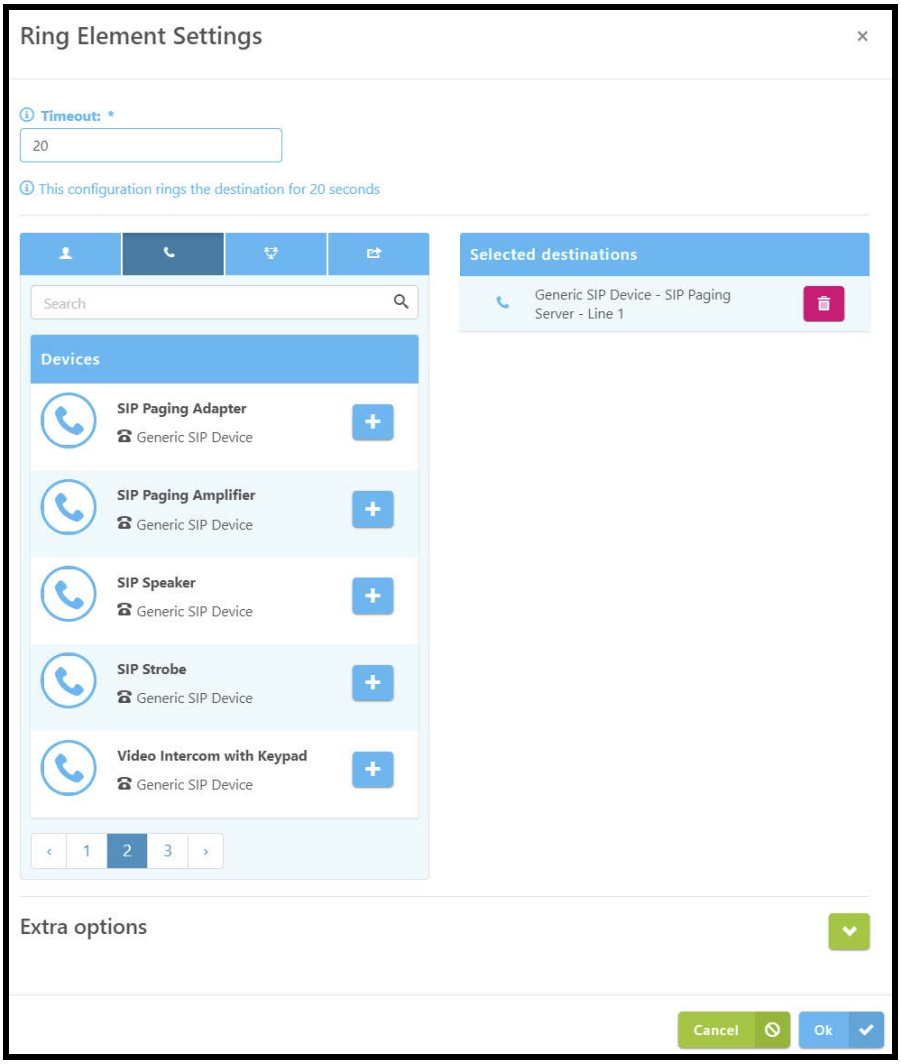
Figure 4-4: Callflow designer



5. From Elements drag **Ring** into the Callflow.

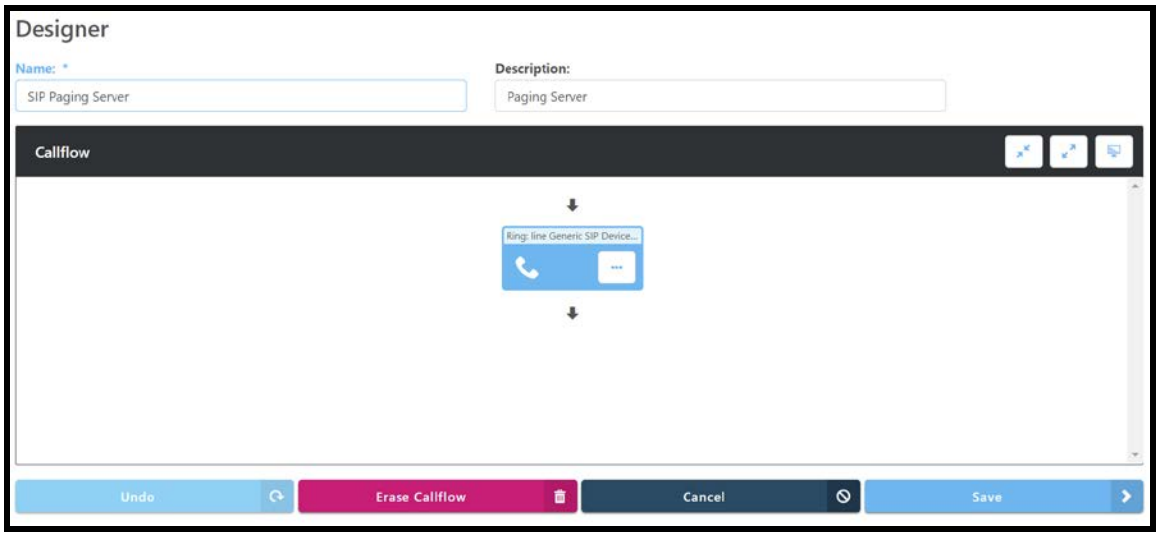
6. Click the yellow exclamation point to open the **Ring Element Settings** popup.
7. Select the Phone tab in the popup.
8. Select the Device that will be used in the group.

Figure 4-5: Ring Element Settings



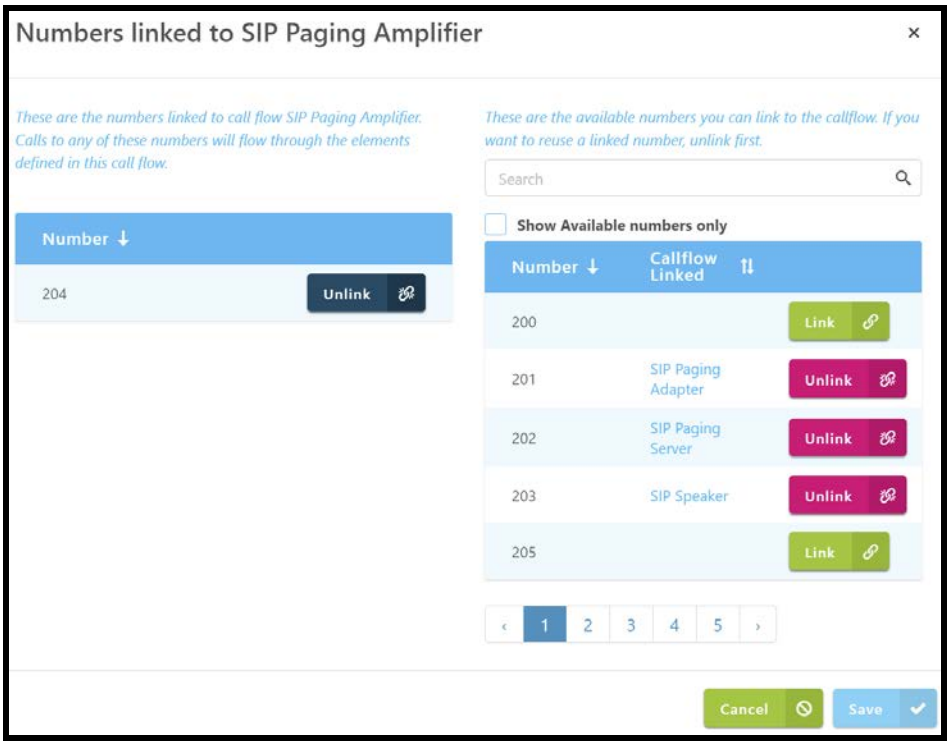
9. Press Ok to save the device to the callflow.
10. Press Save to save the callflow.

Figure 4-6: Callflow Designer



11. Click the **Save** button to create the Phone.
12. Next link a number to the new callflow.
13. Save the number to the callflow.

Figure 4-7: Link a Number



5.0 Configuration Procedure: Setting up the Paging Extension

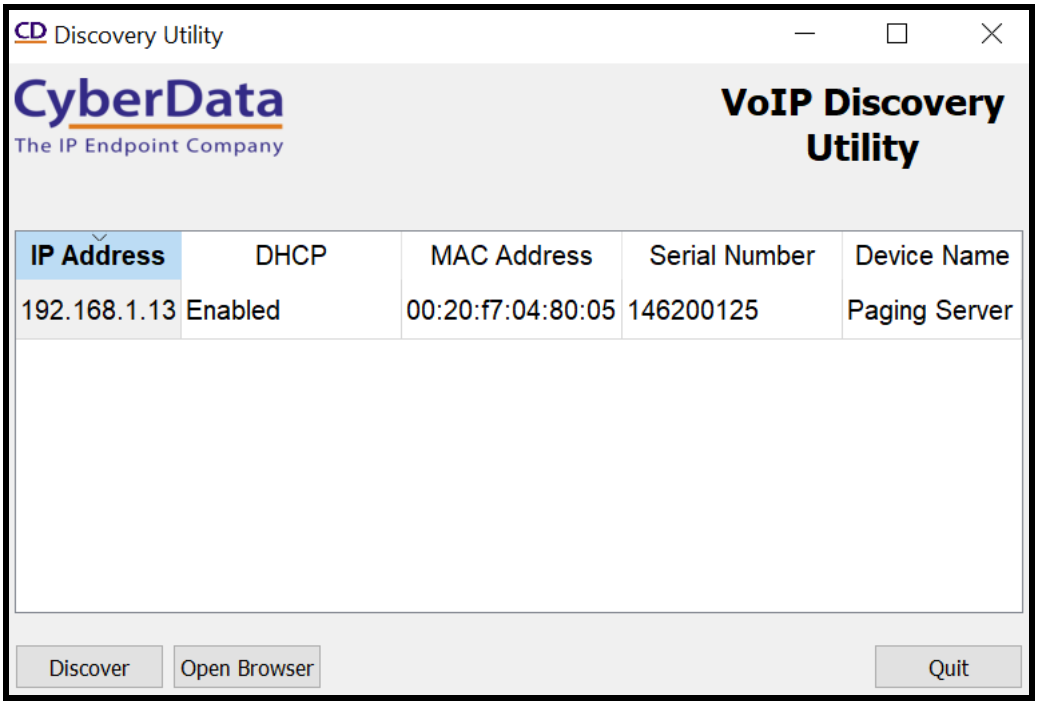
For configuring through the web interface, use the following steps to login to the web interface of your CyberData device.

Table 5-1: Setting Name correlation

CyberData Setting	Blueface Email
Primary SIP Server	SIP Server
Primary SIP User ID	Username
Primary SIP Auth ID	Authentication ID
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

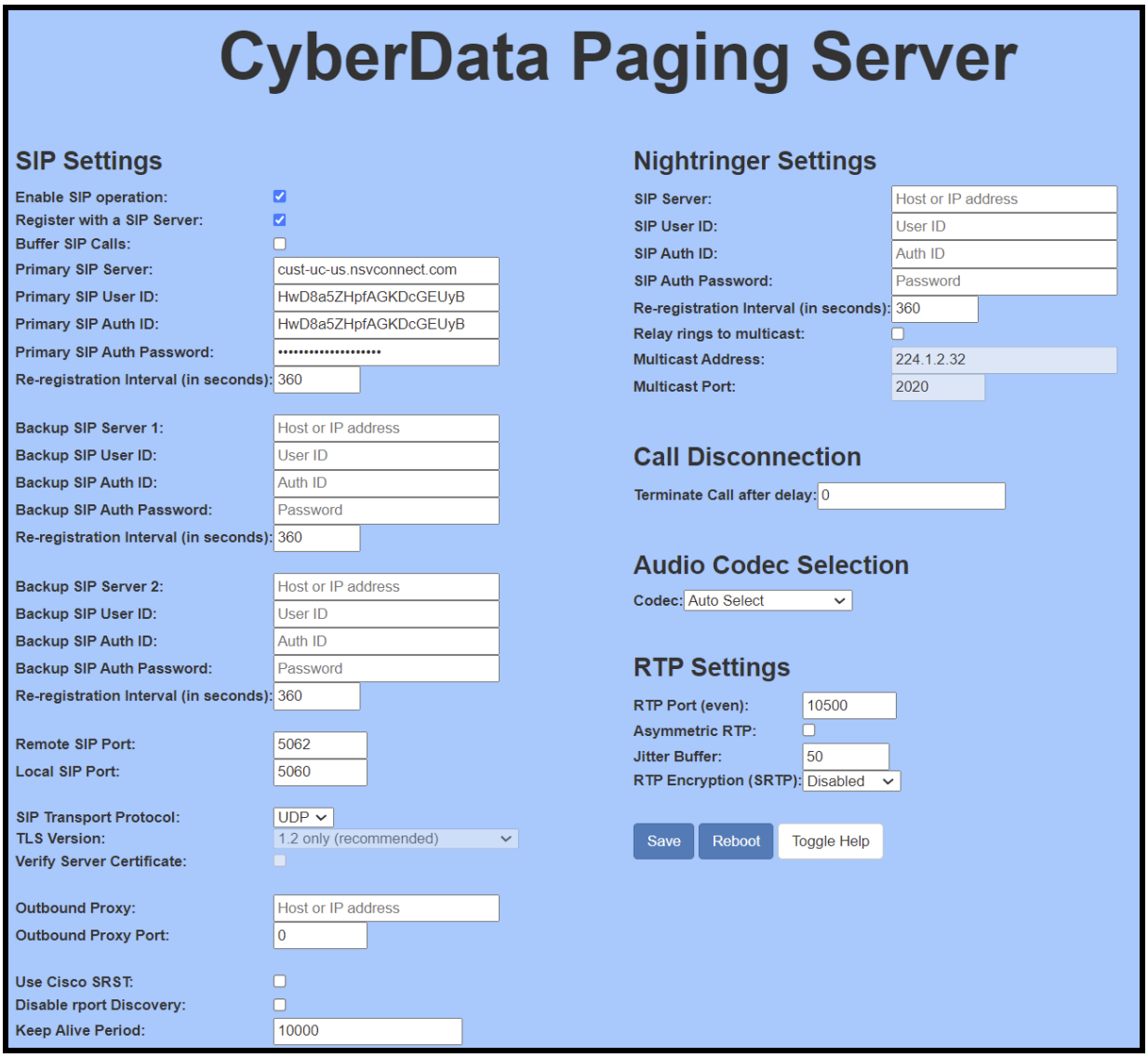
Figure 5-2: Home Tab

3. Navigate to the SIP tab.

Note: *All SIP credentials are listed in an email sent by Blueface after the device was added to the platform.*

4. Set the **Primary SIP Server** to the value listed for SIP Server.
5. Set the **Primary SIP User ID** to the value listed for the Username.
6. Set the **Primary SIP Auth ID** to the value listed for the Authentication ID.
7. Set the **Primary SIP Auth Password** to the value listed for the Password.
8. Set the **Remote SIP Port** to 5062.

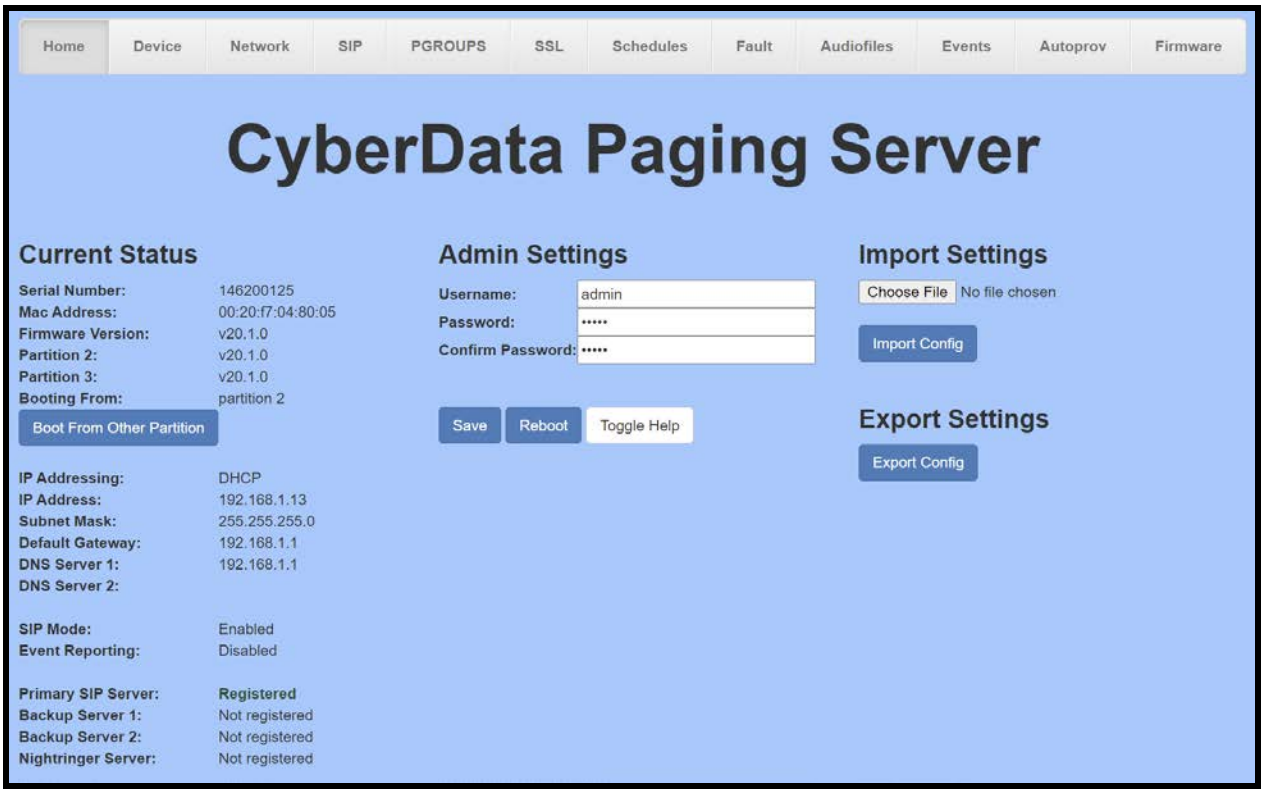
Figure 5-2: SIP Tab



9. Save and Reboot.

Once the paging server finishes rebooting the unit should show Registered on the home tab.

Figure 5-3: Home Tab – Registered

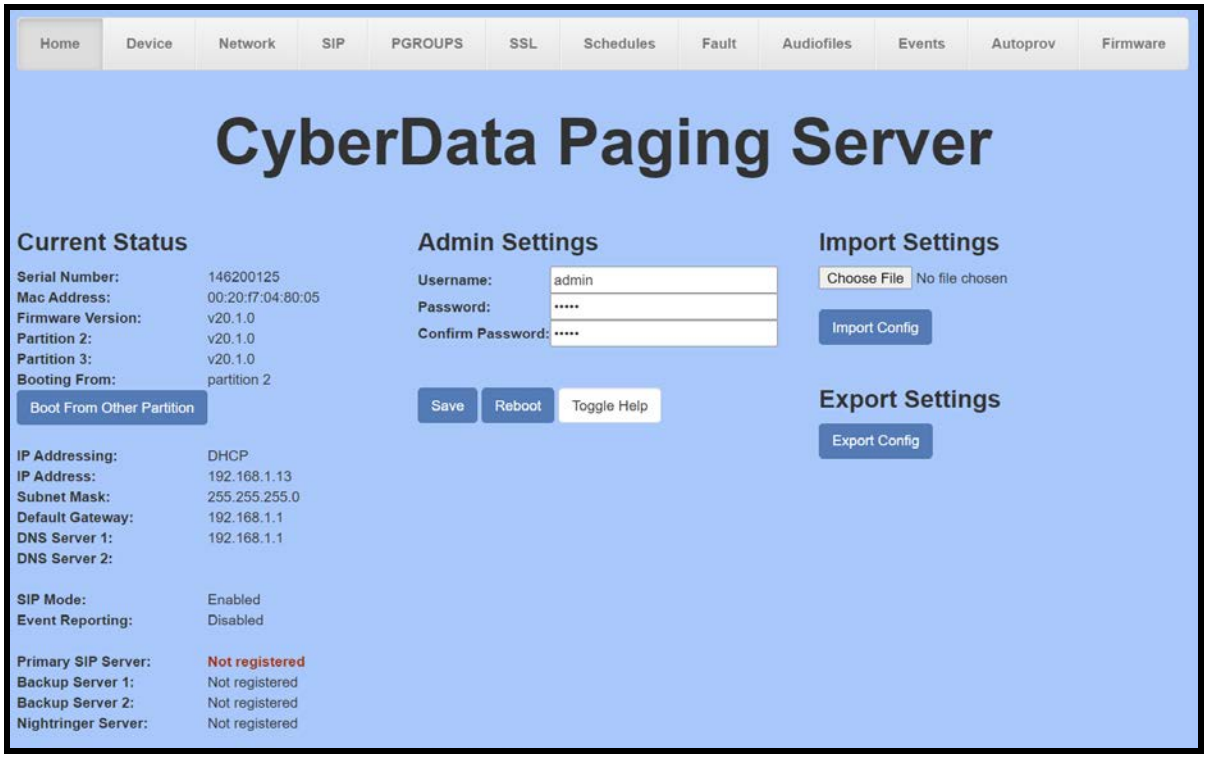


5.1 Configuration Procedure: Setting up the Nightringer Extension

The Nightringer Extension is a secondary extension that will ring when called. This makes the Nightringer extension ideal for use in ring groups.

1. Navigate to the web interface of the device.

Figure 5-4: Home Tab

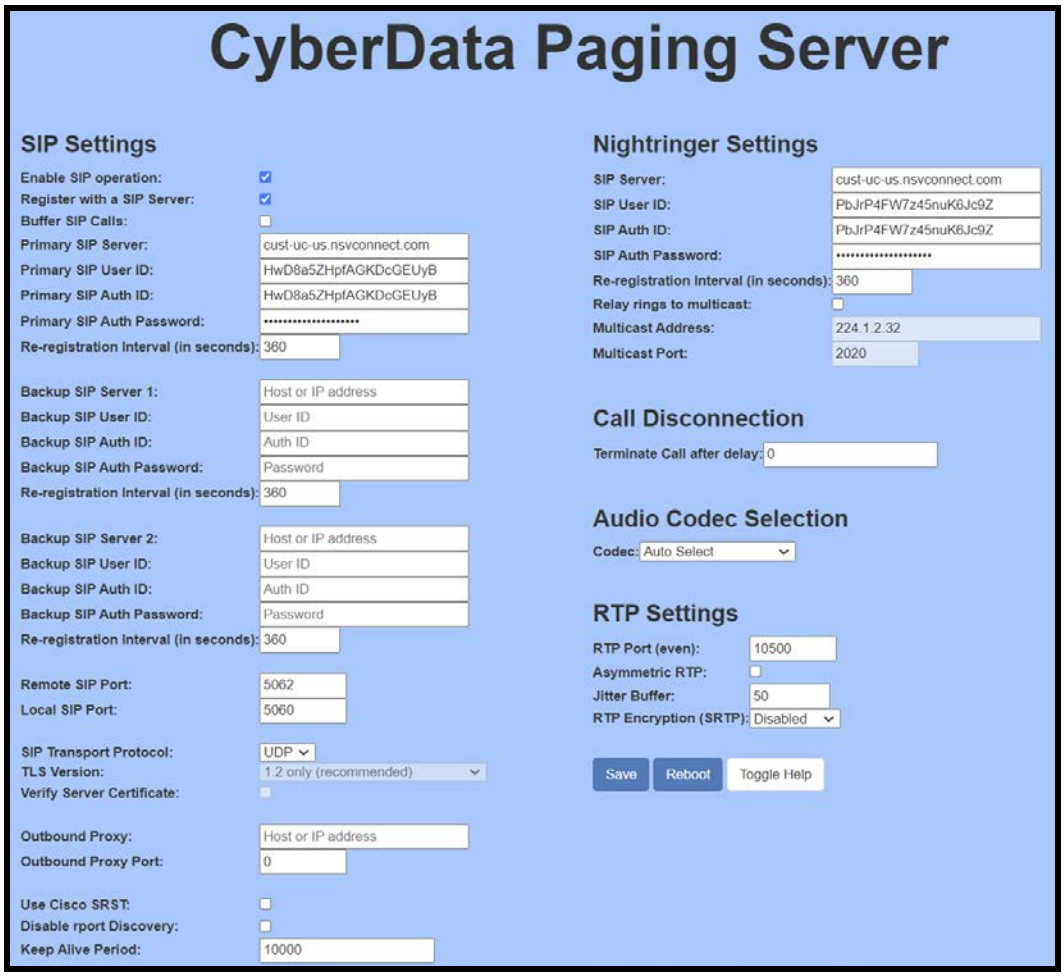


2. Navigate to the SIP tab.

Note: *All SIP credentials are listed in an email sent by Blueface after the device was added to the platform.*

3. Set the **SIP Server** to the value listed for SIP Server.
4. Set the **User ID** to the value listed for the Username.
5. Set the **Authenticate ID** to the value listed for the Authentication ID.
6. Set the **Authenticate Password** to the value listed for the Password.
7. Set the **Remote SIP Port** to 5062.

Figure 5-5: SIP Tab - Nightringer



8. Save and Reboot device.

If the credentials were added correctly, when the unit finishes rebooting Registered in Green should appear next to Nightringer Status on the Home Tab.

Figure 5-6: Nightringer Registered

6.0 Using the CyberData SIP Paging Server

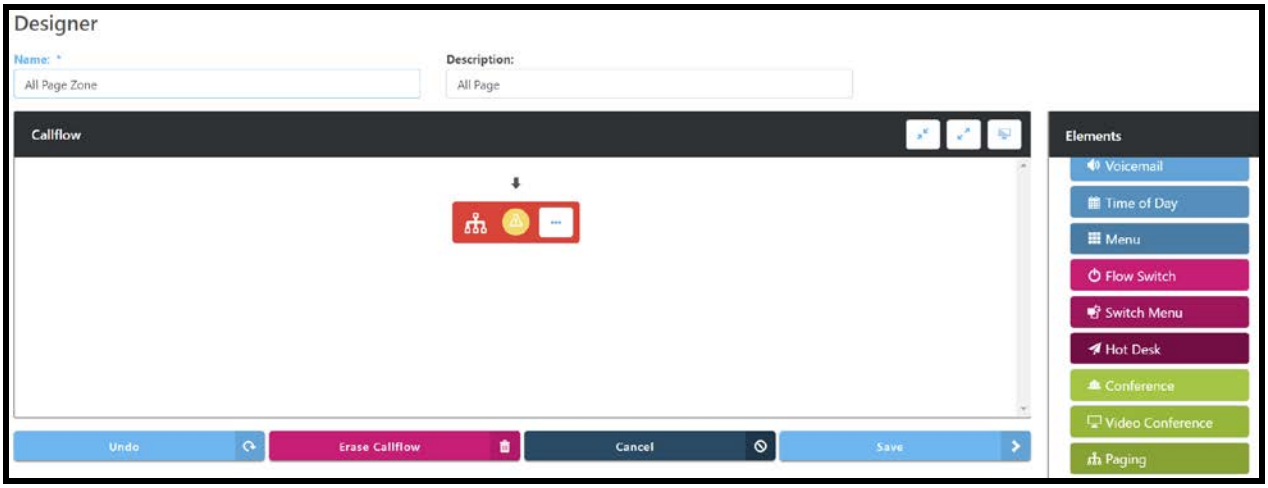
CyberData SIP Paging Server is designed to create a hybrid or wholly IP-Based paging system. The device interface with an existing analog paging system and facilitate overhead paging, while also sending multicast across the network to IP devices. This allows the SIP Paging Server to page to both analog and IP based hardware. When a call is made to the device an announcement can be made through the existing paging system and IP-Based devices. The units can be used by directly calling the SIP extension, in a page group, or with multicast.

6.1 Setting up a page group

After registering the device to Blueface, a page group can be created which allows a call to be made which can reach multiple endpoints simultaneously. This allows for zoned paging directly through the service and does not require additional hardware.

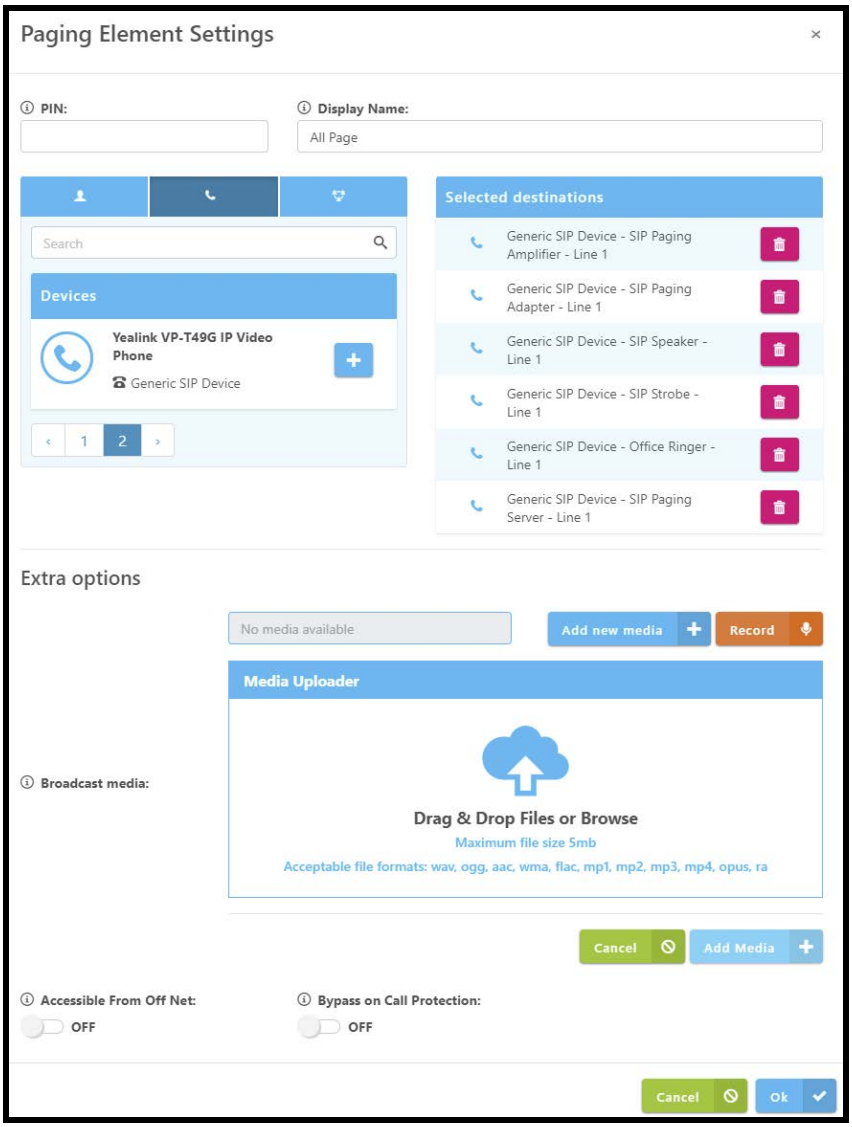
1. Select **Callflows** in Phones on Blueface.
2. Name the new callflow and set a description.
3. In the callflow designer select the Paging Element.

Figure 6-1: Page Group Designer



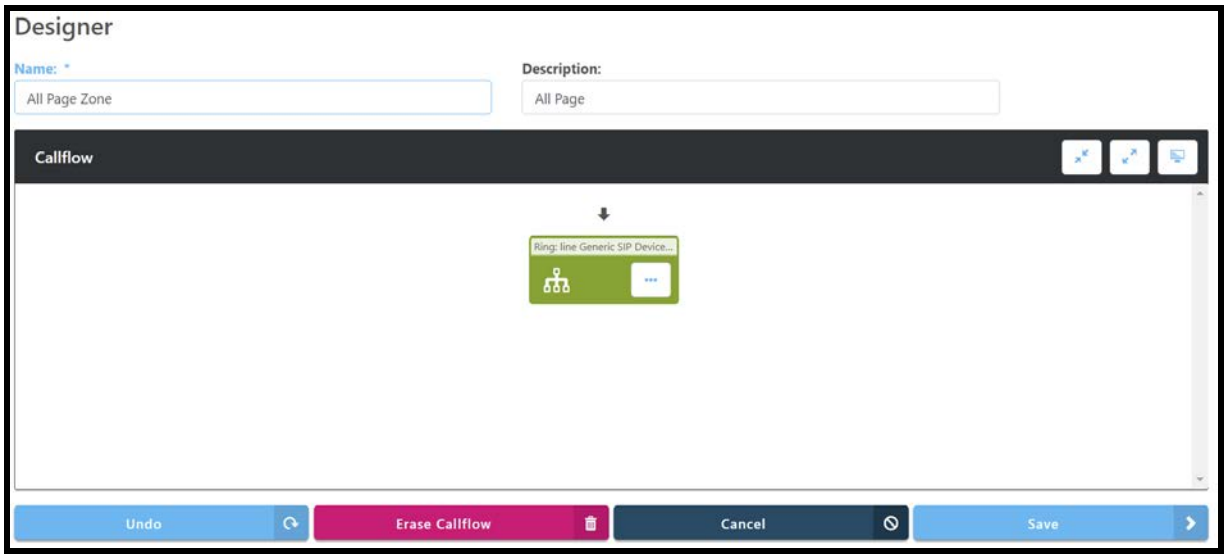
4. After adding the paging element, click on it to assign users.
5. Add all necessary users for the paging group.

Figure 6-2: Paging Element Creation



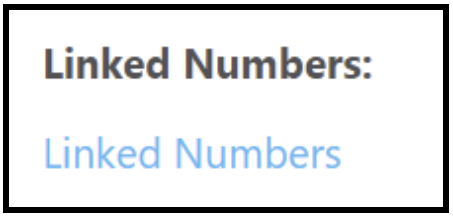
6. Once all the desired users are added, press Ok.
7. Next save the new call flow.

Figure 6-3: Callflow Created



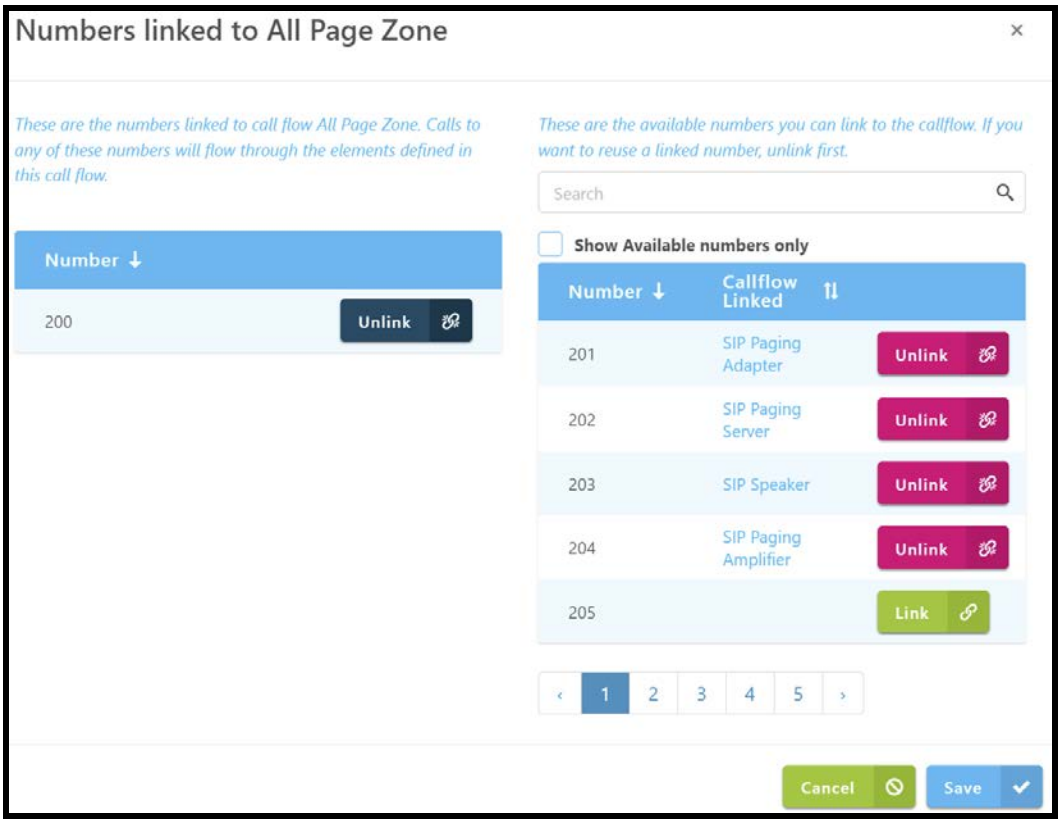
8. After saving the callflow click **Linked Numbers** to set an extension number for the paging group callflow.

Figure 6-4: Linked Numbers



9. Set a number for the paging group.

Figure 6-5: Linking Number



10. Press Save to save the number to the callflow.

The callflow is now ready to be used. When called it will send a SIP call to all group elements and allow a page to be made.

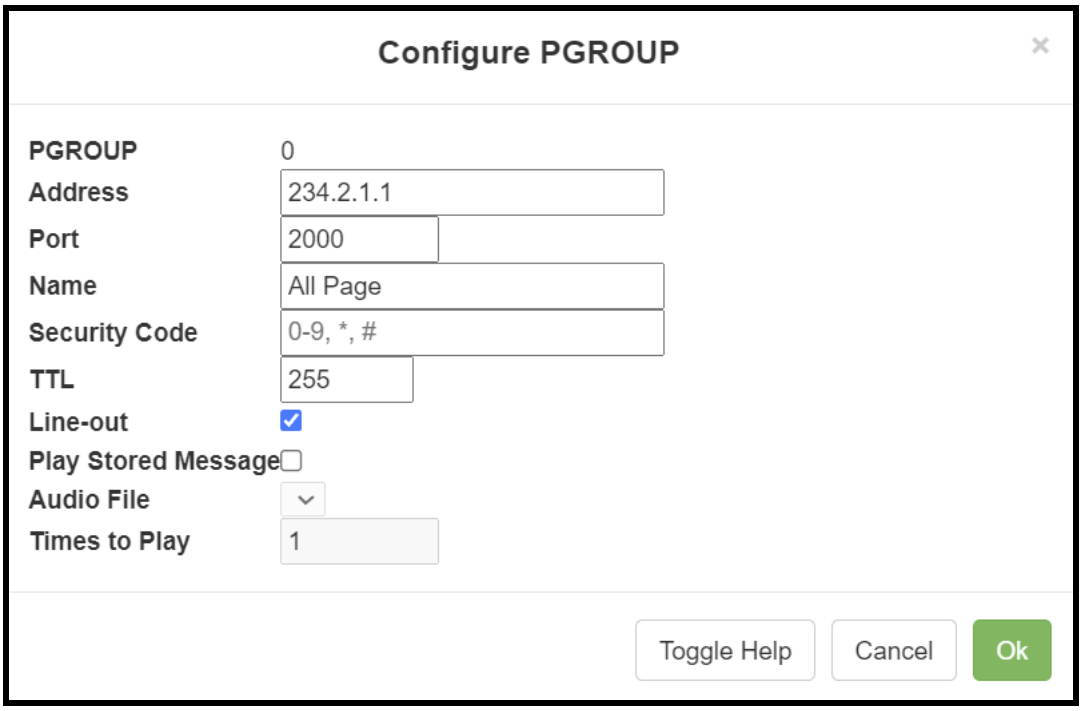
6.2 PGroup Setup

The SIP Paging Server will send multicast across the local area network (LAN) when a call is made to the unit, which allows for both analog and IP-Based devices to be used in a single page group or zone. The SIP Paging Server supports up to 100-page groups which allows for nearly endless zoning capability.

Figure 6-6: PGroup Tab

Each PGroup is effectively a zone and can be customized to fit the needs of that area. The PGroup can either be a live/buffered page or be used to trigger a stored message. The stored message feature allows for a pre-recorded message to be uploaded to the paging server, which can then be triggered by a SIP call. This is ideal for messages that need to be sent regularly, but not on a set schedule. The stored message feature is perfect emergency notifications.

Figure 6-7: PGroup Configuration



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