

Webex Calling Configuration Guide: SIP Strokes

Document Part #931946B

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

Webex Calling Configuration Guide: SIP Strokes
Document #931946B

COPYRIGHT NOTICE:

© 2025, CyberData Corporation, ALL RIGHTS RESERVED.

This configuration guide and related materials are the copyrighted property of CyberData Corporation. No part of this configuration guide or related materials may be reproduced or transmitted, in any form or by any means (except for internal use by licensed customers), without prior express written permission of CyberData Corporation. This configuration guide, and the products, software, firmware, and/or hardware described in this configuration guide are the property of CyberData Corporation, provided under the terms of an agreement between CyberData Corporation and recipient of this configuration guide, and their use is subject to that agreement and its terms.

DISCLAIMER: Except as expressly and specifically stated in a written agreement executed by CyberData Corporation, CyberData Corporation makes no representation or warranty, express or implied, including any warranty or merchantability or fitness for any purpose, with respect to this configuration guide or the products, software, firmware, and/or hardware described herein, and CyberData Corporation assumes no liability for damages or claims resulting from any use of this configuration guide or such products, software, firmware, and/or hardware. CyberData Corporation reserves the right to make changes, without notice, to this configuration guide and to any such product, software, firmware, and/or hardware.

OPEN SOURCE STATEMENT: Certain software components included in CyberData products are subject to the GNU General Public License (GPL) and Lesser GNU General Public License (LGPL) “open source” or “free software” licenses. Some of this Open Source Software may be owned by third parties. Open Source Software is not subject to the terms and conditions of the CyberData COPYRIGHT NOTICE or software licenses. Your right to copy, modify, and distribute any Open Source Software is determined by the terms of the GPL, LGPL, or third party, according to who licenses that software. Software or firmware developed by CyberData that is unrelated to Open Source Software is copyrighted by CyberData, subject to the terms of CyberData licenses, and may not be copied, modified, reverse-engineered, or otherwise altered without explicit written permission from CyberData Corporation.

TRADEMARK NOTICE: CyberData Corporation and the CyberData Corporation logos are trademarks of CyberData Corporation. Other product names, trademarks, and service marks may be the trademarks or registered trademarks of their respective owners.

Revision Information

6/29/2022 – Initial Release

1/1/2025 – Updated nomenclature

Table of Contents

Revision Information.....	2
Table of Contents.....	3
1.0 Supported CyberData Products	4
2.0 Before You Start.....	5
3.0 Setting up a Workspace in Webex Calling	6
4.0 Setting up the CyberData SIP Strobe	10
5.0 Setting the blink options.....	13
5.1 Setting up a Multicast priority	14
5.2 Creating a paging group in Webex Calling.....	15
6.0 Setup Diagram.....	19
7.0 FAQ.....	20
8.0 Contact CyberData Corporation	21

1.0 Supported CyberData Products

This section describes the products used for interoperability testing with Webex Calling.

Table 1-1: Supported CyberData Products

EQUIPMENT	MODEL or PART NUMBER	FIRMWARE VERSION
CYBERDATA SIP RGB (MULTI-COLOR) STROBE	011376	20.2.0 or later
CYBERDATA SIP OUTDOOR RGB (MULTI-COLOR) STROBE	011479	20.2.0 or later

2.0 Before You Start

Network Advisories

Webex Calling uses a Fully Qualified Domain Name (FQDN) for the SIP server and Outbound Proxy addresses. The CyberData strobe needs to perform a DNS query to resolve the IP address of Webex's Outbound Proxy FQDN.

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

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

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

The strobe's paging and nightringer 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 strobe's product webpage:

SIP RGB (Multi-Color) Strobe:

<https://www.cyberdata.net/collections/sip/products/011376>

SIP Outdoor RGB (Multi-Color) Strobe:

<https://www.cyberdata.net/collections/sip/products/011479>

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.

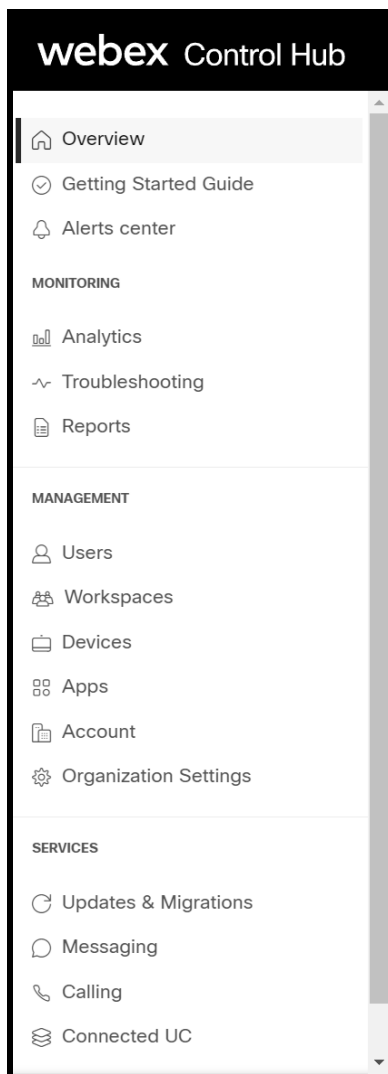
3.0 Setting up a Workspace in Webex Calling

This section outlines how to create a Webex Calling user in the Webex Control Hub (CH). This will provide the credentials to then setup the CyberData device.

[Cisco has detailed instructions in the Cisco Webex Help Center in the Add your customer managed device article.](#)

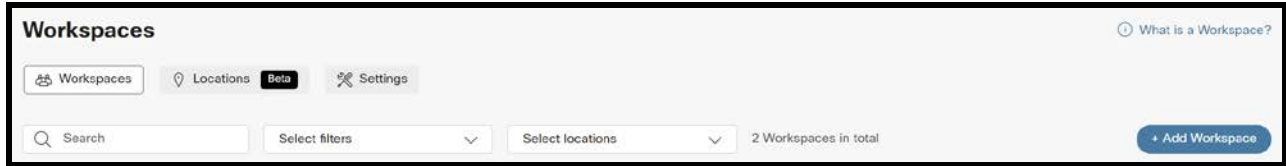
1. Login to [Webex Control Hub as the administrator](#).
2. From the overview page select **Workspaces**.

Figure 3-1: Overview Side Bar



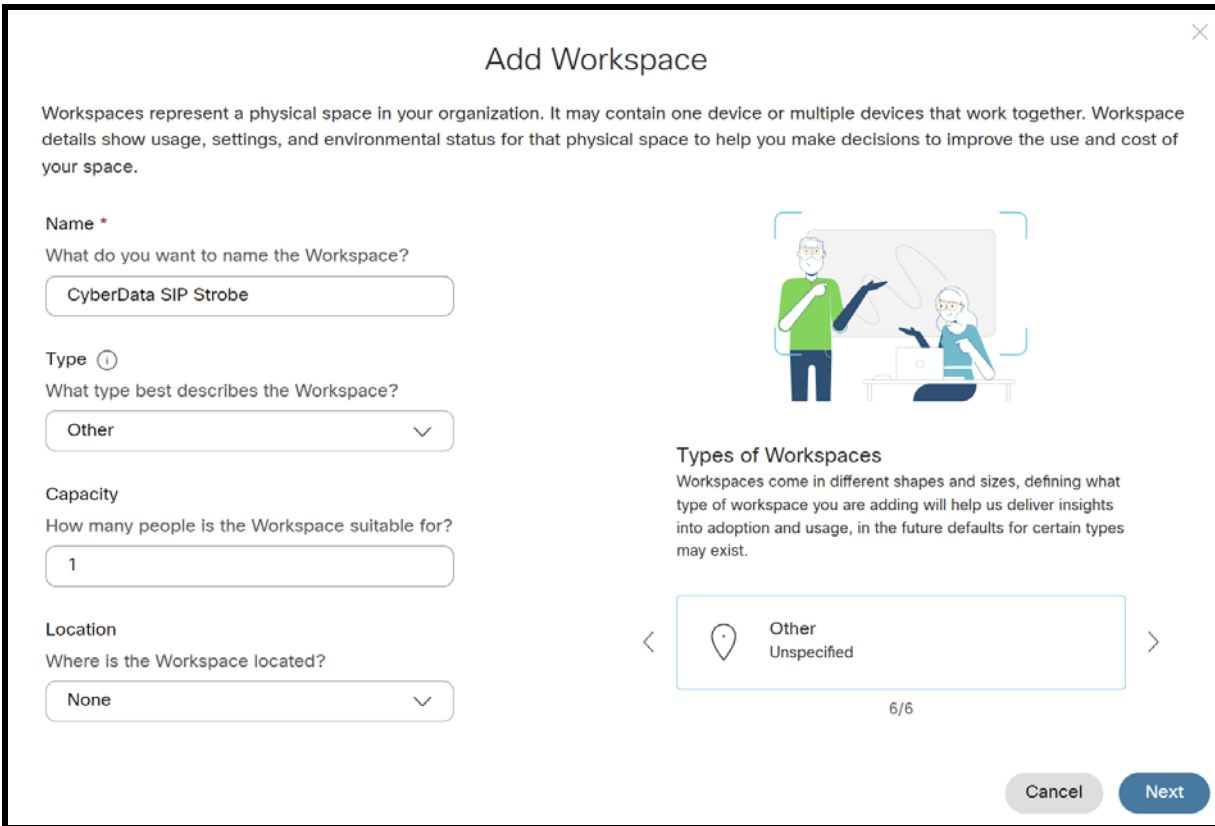
3. From the Workspaces page select the **Add Workspace** button.

Figure 3-2: Workspaces Page



4. On the Add Workspace popup create a Workspace for the strobe.

Figure 3-3: Create a Workspace

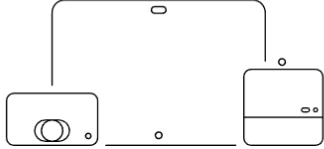


5. After creating the workspace select **Cisco IP Phone**.

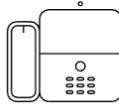
Figure 3-4: Pick a device

Add Workspace

What kind of device do you want to set up in this workspace?



Room, Board or Desk series
e.g. Cisco Webex Board, Room, and Desk series, and Webex Share.



Cisco IP Phone
e.g. Cisco 8845, 8865, 8800 and Analog Telephone Adapter ports

Select Device
Customer Managed Device

Device Vendor
Cyberdata Customer Managed

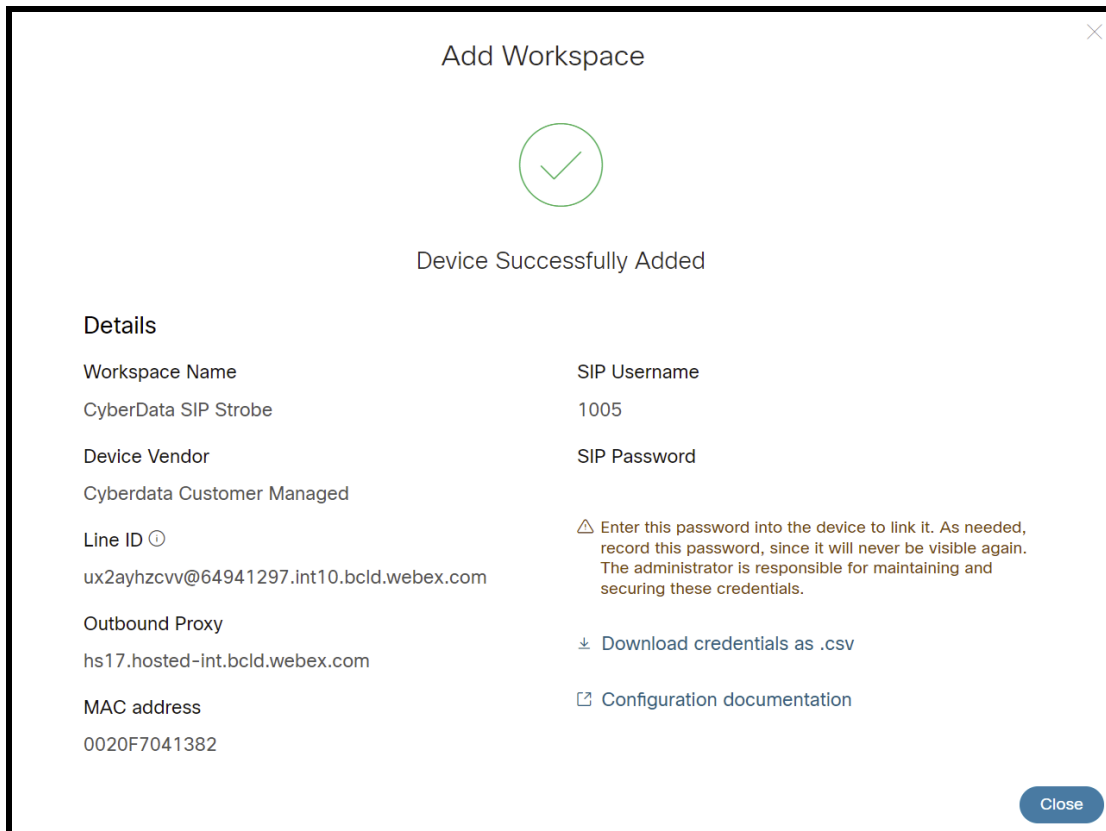
Enter MAC Address
Enter the MAC address of the IP phone you want to add.
0020f7041382

*I confirm that creating this device profile will expose sensitive device credentials that could be misused and exploited by users with unauthorized access. You are responsible for securing and recycling these credentials. You agree that Cisco is not responsible for any fraudulent charges or phone calls that result from the exposure of these device credentials. Cisco offers limited support for third-party devices connected via this interface. Cisco will only investigate basic issues for third-party devices that are actively registered to the Webex Calling platform. Any other third-party device-related support issues should be directed to the third-party device vendor, including issues related to onboarding, deployment, configuration, or connectivity.

Back Next

6. Set the device to **Customer Managed Device**.
7. Select **CyberData Customer Managed** as the Device Vender.
8. Enter the MAC address of the CyberData device.
9. Press **Next** to continue.

Figure 3-5: Device Successfully Added



Note: The password has been obscured.

10. Make sure to press **Download credentials as .csv** because this page is only shown once.

4.0 Setting up the CyberData SIP Strobe

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

Table 4-1: SIP Credential Explanation

Webex Calling Credential	CyberData Setting
2 nd Half of Line ID	Primary SIP Server
1 st Half of Line ID	Primary SIP User ID
SIP Username	Primary SIP Auth ID
SIP Password	Primary SIP Auth Password
Outbound Proxy	Outbound Proxy

Note: CyberData devices do not support ‘Line IDs’ and the ID provided by Webex must be broken up to be used by the CyberData device. Webex provides the line ID in the following format: “UserID@SIP_Server_Address”. Everything before the @ symbol is used as CyberData’s Primary SIP User ID and everything after the @ symbol is used as the Primary SIP Server.

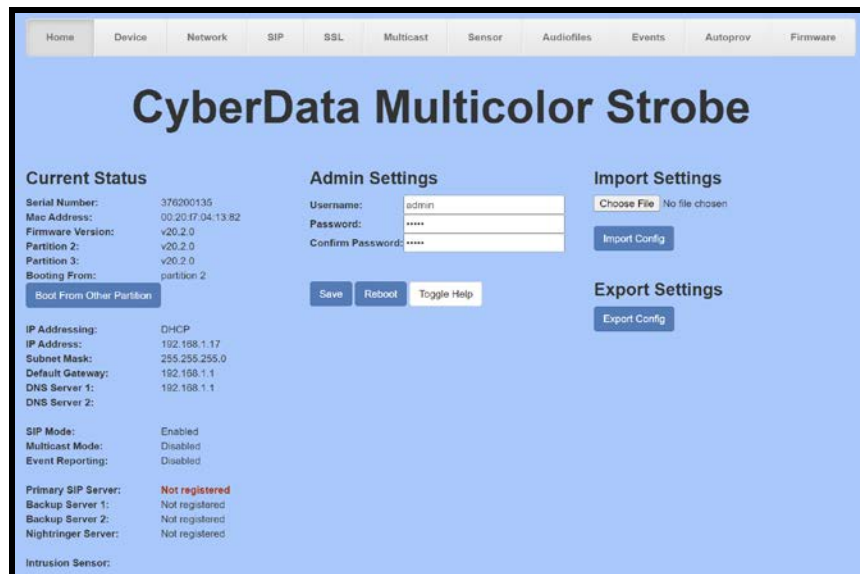
CyberData’s default login credentials are:

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 2nd half of the Line ID.
4. Set the **Primary SIP User ID** to the 1st half of the Line ID.

Note: Do not add an @ to SIP Server or User ID.

5. Set the **Primary SIP Auth ID** to the SIP Username.
6. Set the **Primary SIP Auth Password** to the SIP Password.
7. Set the **Outbound Proxy** to the Outbound Proxy.
8. Leave the **Outbound Proxy port** set to 0.
9. Set the **SIP Transport** to TLS.
10. Ensure **TLS Version** is set to **1.2 Only (Recommended)**.
11. Set RTP Encryption to **Mandatory**.
12. Save and Reboot.

Figure 4-2: SIP Tab

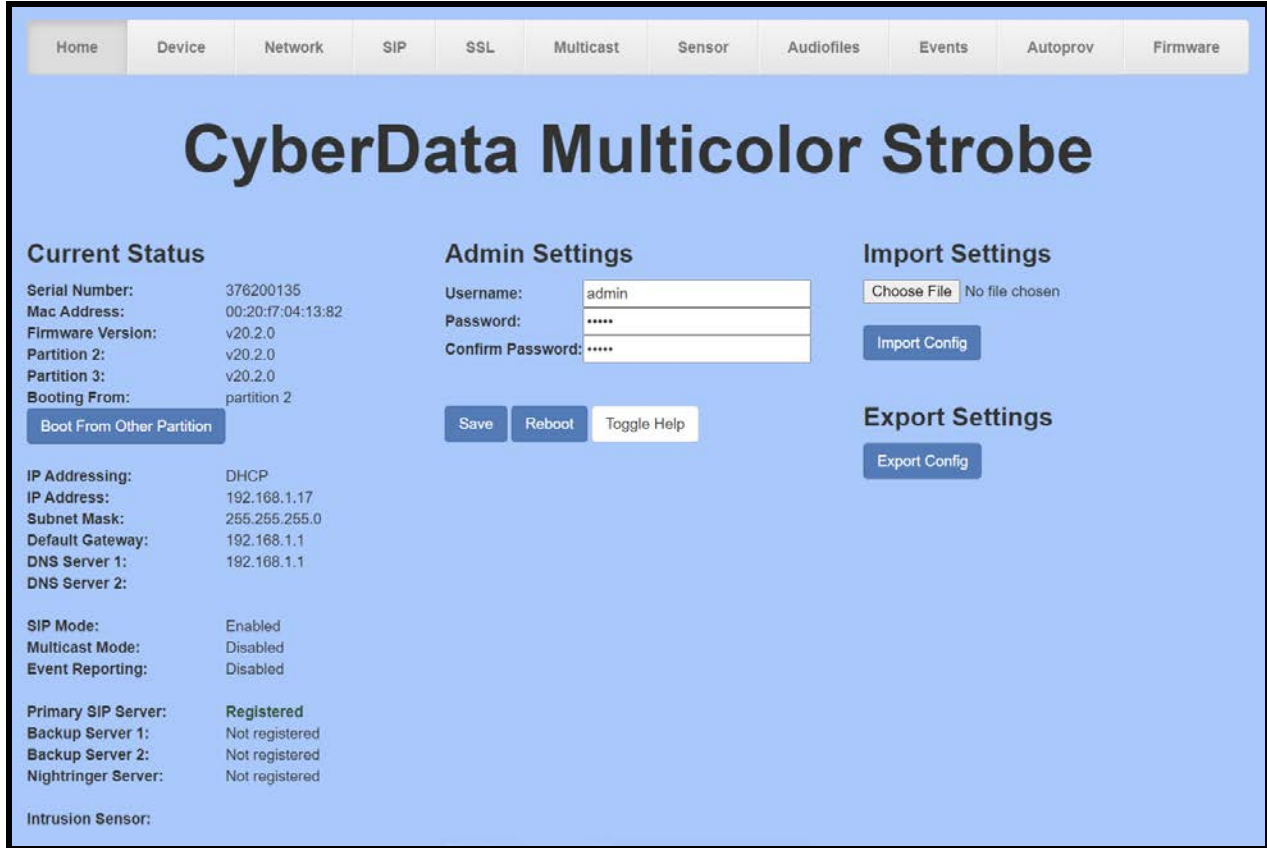
The screenshot displays the 'CyberData Multicolor Strobe' configuration page. It is divided into several sections:

- SIP Settings:** Includes checkboxes for 'Enable SIP operation' and 'Register with a SIP Server'. Fields include 'Primary SIP Server' (64941297_int10.bcld.webex.com), 'Primary SIP User ID' (ux2ay7hzcwv), 'Primary SIP Auth ID' (1005), 'Primary SIP Auth Password' (masked), and 'Re-registration Interval (in seconds)' (360). It also has sections for Backup SIP Servers 1 and 2, Remote SIP Port (5060), Local SIP Port (5060), SIP Transport Protocol (TLS), TLS Version (1.2 only), Outbound Proxy (hs17.hosted-int.bcld.webex.com), and Outbound Proxy Port (0).
- Nightringer Settings:** Fields for 'SIP Server', 'SIP User ID', 'SIP Auth ID', 'SIP Auth Password', and 'Re-registration Interval (in seconds)' (360).
- SIP Ring Strobe Settings:** Includes 'Blink Strobe on Ring' (checked) and a table for scene settings: ADA (Brightness: 255, Color: Red, Green, Blue).
- MWI Strobe Settings:** Includes 'Blink Strobe on MWI' (unchecked) and a table for scene settings: ADA (Brightness: 255, Color: Red, Green, Blue).
- Nightringer Strobe Settings:** Includes 'Blink Strobe on Nightringer' (unchecked) and a table for scene settings: ADA (Brightness: 255, Color: Red, Green, Blue).
- Call Disconnection:** 'Terminate Call after delay' (0).
- Audio Codec Selection:** 'Codec' set to 'Auto Select'.
- RTP Settings:** 'RTP Port (even)' (10800), 'Asymmetric RTP' (unchecked), 'Jitter Buffer' (50), and 'RTP Encryption (SRTP)' (Mandatory).

At the bottom, there are buttons for 'Save', 'Reboot', and 'Toggle Help'.

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

Figure 4-3: Home Tab – Registered



5.0 Setting the blink options

CyberData strobes are designed to illuminate on an incoming call or multicast stream. The strobe uses RGBW LED's and this allows any custom colors and ADA compliance from a single device. The strobe uses 'Blink Scenes' or illumination patterns for the strobe.

- ADA
- Slow Fade
- Fast Fade
- Slow Blink
- Fast Blink

The strobe can then have a color set for the notification, CyberData has preset colors available in a drop-down menu or any custom value can be used with 0-255 values for Red, Green, and Blue.

Figure 5-1: Set the Dial out Extension

The image shows a configuration interface for three types of strobes: SIP Ring, MWI, and Nightringer. Each section has a 'Blink Strobe on [Device]:' checkbox, a 'Scene' dropdown menu, a 'Brightness' input field, a 'Color' dropdown menu, and three color input fields for Red, Green, and Blue. A 'Preview' button is located to the right of each color input field.

Section	Blink Strobe on [Device]:	Scene	Brightness	Color	Red	Green	Blue	Preview
SIP Ring Strobe Settings	<input checked="" type="checkbox"/>	ADA	255	Color	255	255	255	Preview
MWI Strobe Settings	<input type="checkbox"/>	ADA	255	Color	255	255	255	Preview
Nightringer Strobe Settings	<input type="checkbox"/>	ADA	255	Color	255	255	255	Preview

5.1 Setting up a Multicast priority

CyberData devices support multicast that works in a priority system, where a higher priority will always supersede a lower priority. For example, a multicast page to priority 4 would play over a background music stream at priority 0. SIP Calls are treated as priority 4.5.

Figure 5-2: Multicast Tab

CyberData Multicolor Strobe

Multicast Settings

Enable Multicast Operation:

Priority	Address	Port	Name	Relay	Scene	Brightness	Color	Red	Green	Blue	
0	239.168.3.1	2000	Background Music	<input type="checkbox"/>	ADA	255	Color	255	255	255	Preview
1	239.168.3.2	3000	MG1	<input type="checkbox"/>	Fast Blink	255	Color	70	0	128	Preview
2	239.168.3.3	4000	MG2	<input type="checkbox"/>	Slow Blink	255	Color	255	0	0	Preview
3	239.168.3.4	5000	MG3	<input type="checkbox"/>	Fast Fade	255	Color	255	35	0	Preview
4	239.168.3.5	6000	General Announcements	<input type="checkbox"/>	Slow Fade	255	Color	255	35	0	Preview
5	239.168.3.6	7000	MG5	<input type="checkbox"/>	ADA	255	Color	255	255	255	Preview
6	239.168.3.7	8000	MG6	<input type="checkbox"/>	ADA	255	Color	255	255	255	Preview
7	239.168.3.8	9000	MG7	<input type="checkbox"/>	ADA	255	Color	255	255	255	Preview
8	239.168.3.9	10000	MG8	<input type="checkbox"/>	ADA	255	Color	255	255	255	Preview
9	239.168.3.10	11000	Emergency	<input type="checkbox"/>	ADA	255	Color	255	255	255	Preview

Polycom Default Channel: 1

Polycom Priority Channel: 24

Polycom Emergency Channel: 25

SIP calls are considered priority 4.5

Port range can be from 2000-65535

Priority 9 is the highest and 0 is the lowest

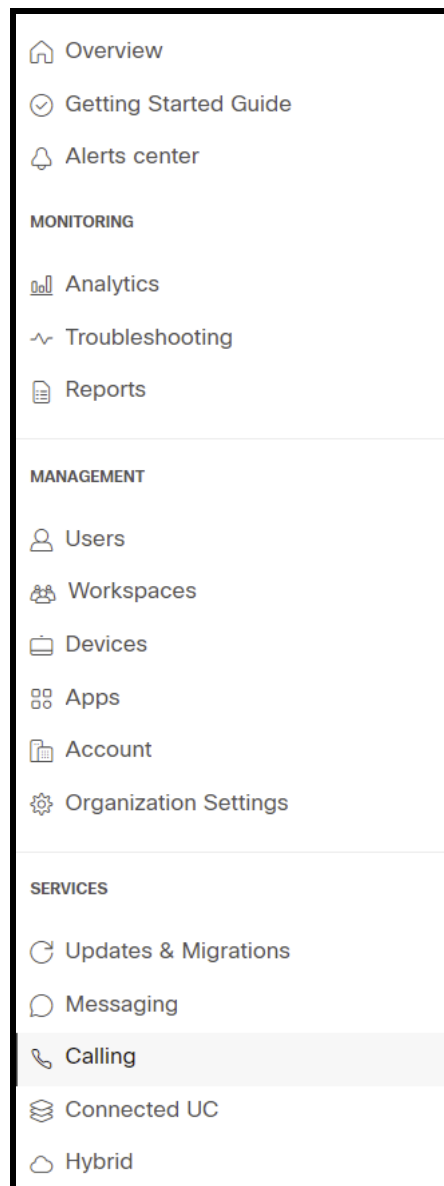
A higher priority audio stream will always supersede a lower one

5.2 Creating a paging group in Webex Calling

Webex calling supports paging groups that allow one-way pages to up to 75 devices at the same time. This makes products like VoIP Speakers easy to page with in the Cisco Webex calling environment. Follow these steps to setup a paging group.

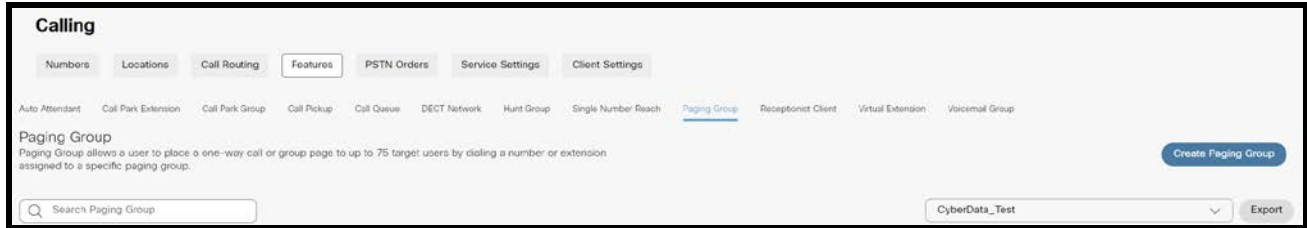
1. Select Calling from the Services sub section in the sidebar.

Figure 5-3: Select Calling



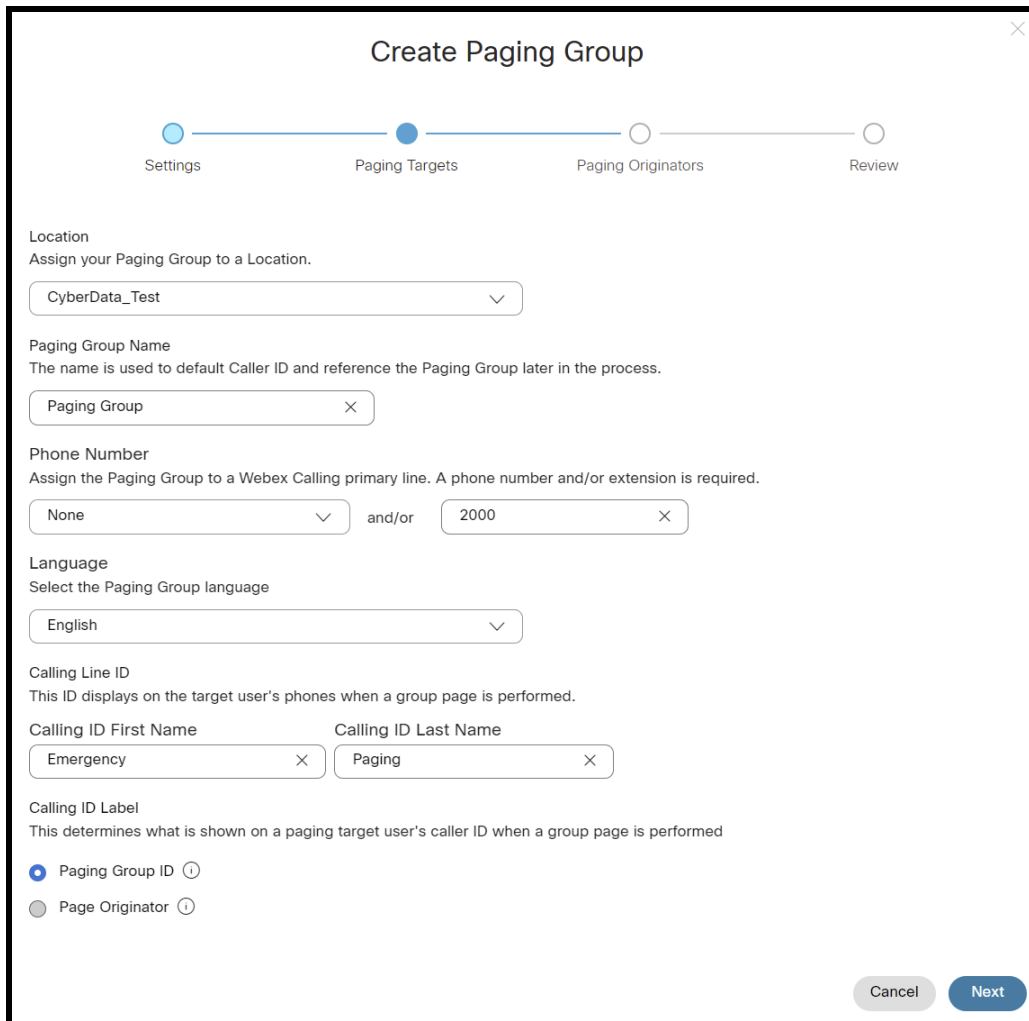
- From the Calling page select **Features** and then **Paging Group**.

Figure 5-4: Calling Settings



- Press **Create Paging Group** to begin the paging group creation process.

Figure 5-5: Naming a Paging Group



4. Set the location of the paging group.
5. Name the paging group.
6. Set a phone number and/or an extension number.
7. Pick the desired language for the group.
8. Set the Calling ID Name.
9. Pick if the group ID or Page Originator shows up on the caller ID.
10. Press **Next**.

Figure 5-6: Set the Paging Targets

Create Paging Group

Settings **Paging Targets** Paging Originators Review

Paging Targets ⓘ

Add Users and/or Workspaces
Search for and add up to 75 users and/or workspaces by name, phone number, or extension. Click the name to view more details.

Add User or Workspace

Name ▲	Phone Number	Extension	
CyberData VoIP Speaker .		1004	

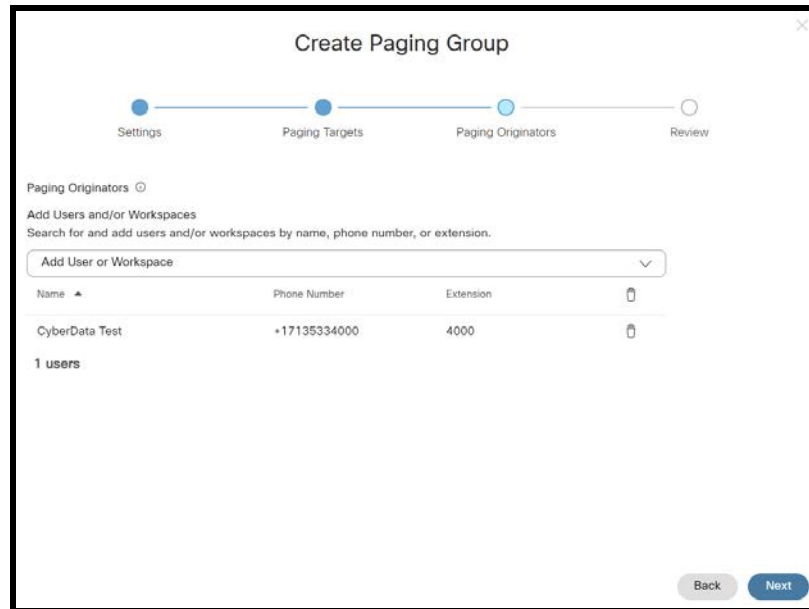
1/75 users

Copy my paging targets to my paging originators

Back Next

11. Choose what devices are in the paging group.
12. Press **Next**.

Figure 5-7: Paging Originators

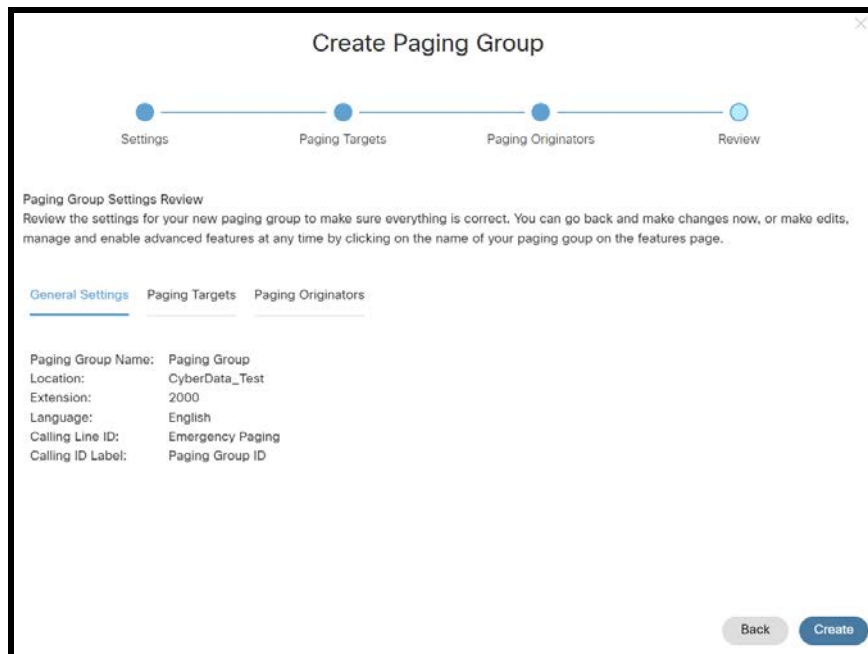


13. Choose what numbers can page to the paging group.

14. Press **Next**.

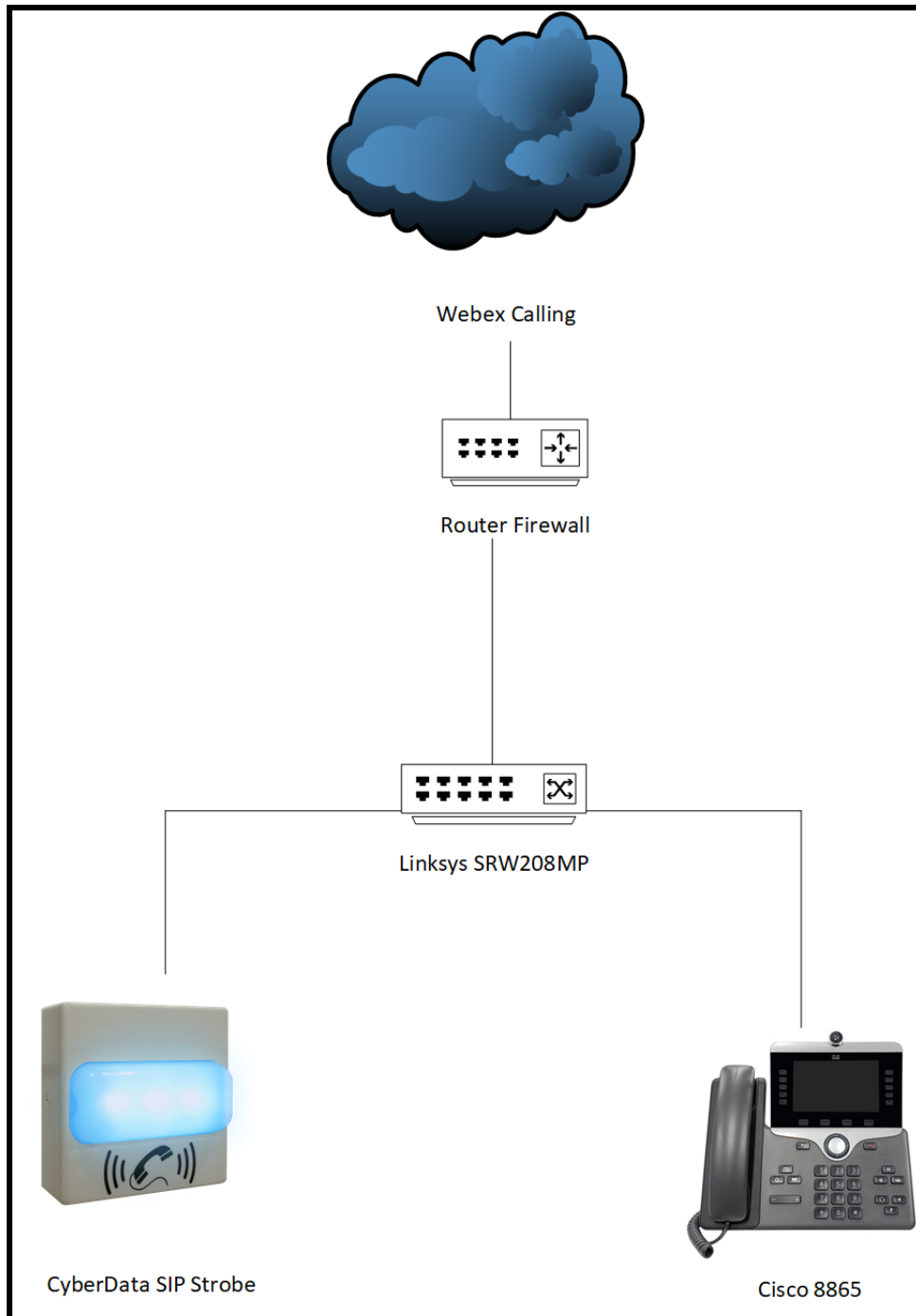
15. Review the settings and press **Create**.

Figure 5-8: Review Settings



6.0 Setup Diagram

Figure 6-1: Interoperability Test Infrastructure



7.0 FAQ

Why is the device registering to a backup server and not the primary server listed in the SRV record?

CyberData devices have a bug where they will not fall back to the primary server listed in the SRV record in the event it switches to a backup server. To resolve this issue simply reboot the device. This will be fixed in a future release.

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