CyberData
The IP Endpoint Company

webex
by CISCO

Webex Calling Configuration Guide: VoIP SIP/Multicast Speaker

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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 VOIP SIP/MULTICAST CEILING MOUNT SPEAKER	011511	20.0.1
CYBERDATA VOIP SIP/MULTICAST WALL MOUNT SPEAKER	011512	20.0.1
CYBERDATA SIP OFFICE RINGER	011216	20.4.1

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 VoIP SIP/Multicast Speaker 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 speaker to use:

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

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

The speaker'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 speaker's product webpage:

SIP VoIP SIP/Multicast Ceiling Mount Speaker:
https://www.cyberdata.net/collections/sip/products/011511

SIP VoIP SIP/Multicast Wall Mount Speaker:
https://www.cyberdata.net/collections/sip/products/011512

SIP Office Ringer:
https://www.cyberdata.net/collections/sip/products/011216

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.](#)
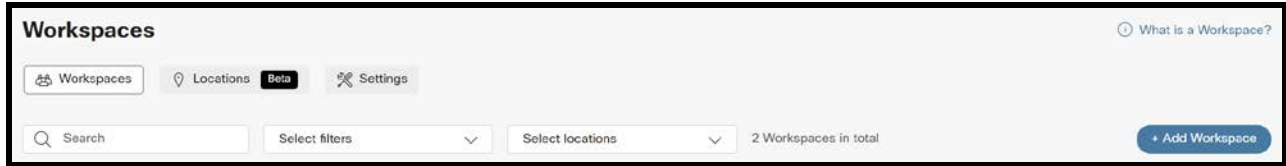
1. Login to [Webex Control Hub as the administrator](#).
2. From the overview page select **Workspaces**.
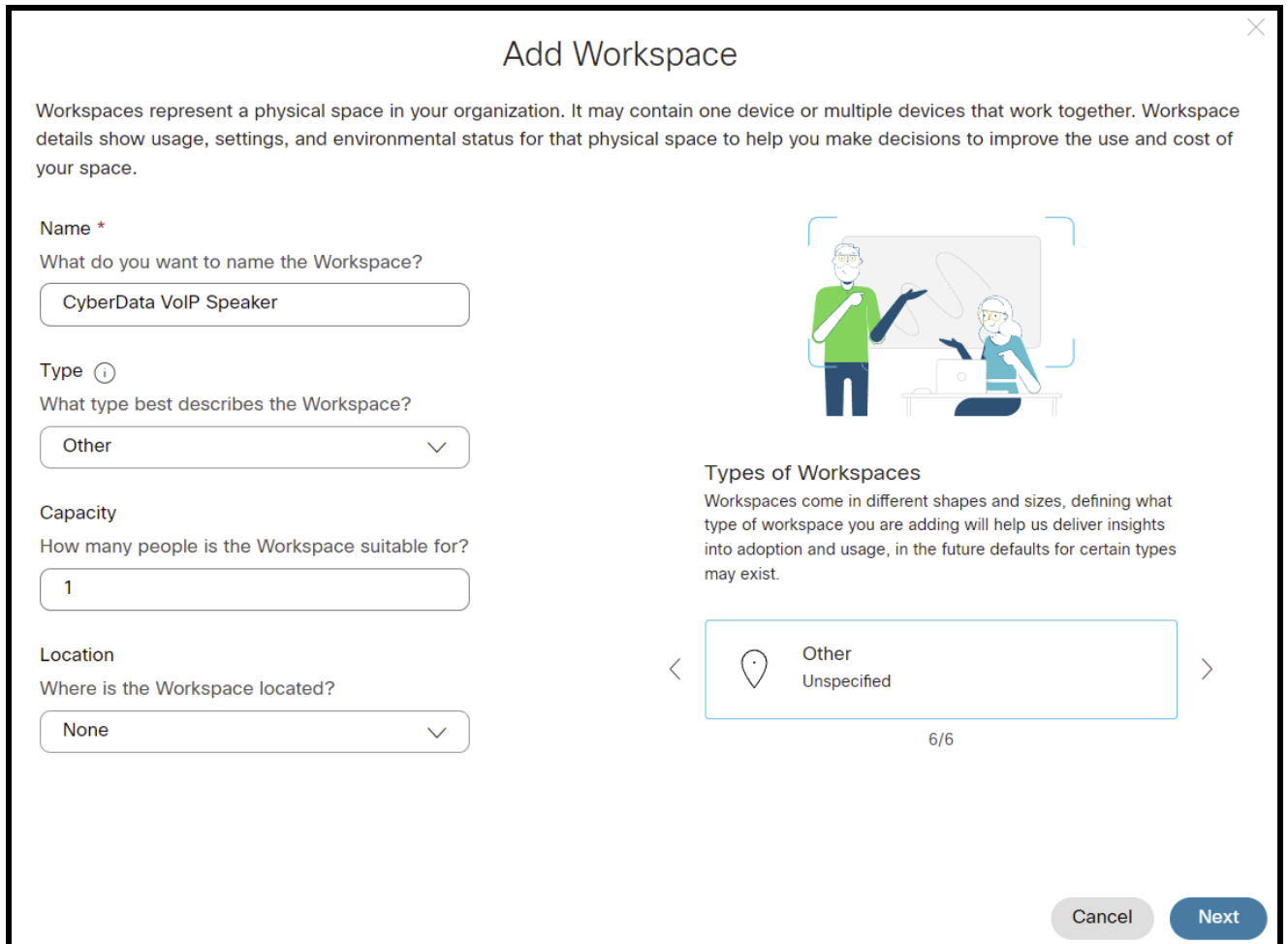
Figure 3-1: Overview Side Bar
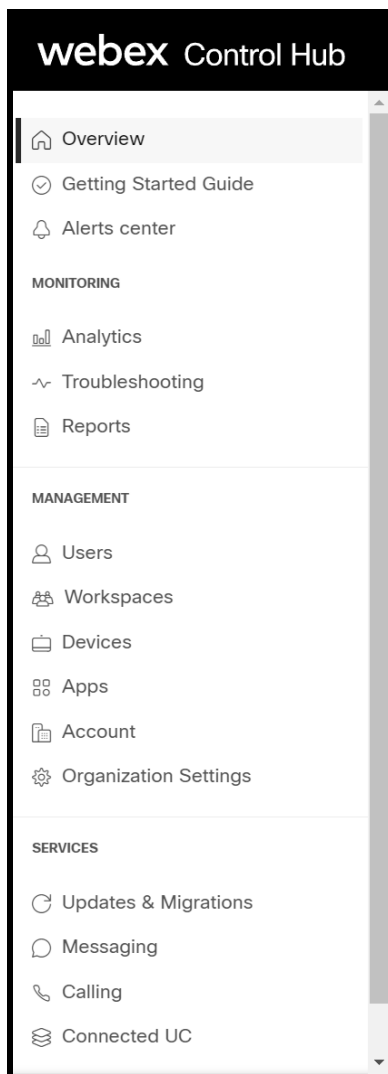
3. From the Workspaces page select the **Add Workspace** button.

Figure 3-2: Workspaces Page

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

Figure 3-3: Create a Workspace

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

Figure 3-4: Pick a device

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. Check the box to confirm authorization.
10. Press **Next** to continue.

Figure 3-5: <u>Set an Extension Number</u>

11. Set a location for the device.
12. If desired set a phone number for the device.
13. Set an Extension Number for the device

Note: *It is possible to create a workspace with both a phone number and extension number, or just one or the other. Depending on the nature of the use case set the numbers accordingly.*

Figure 3-6: Device Successfully Added
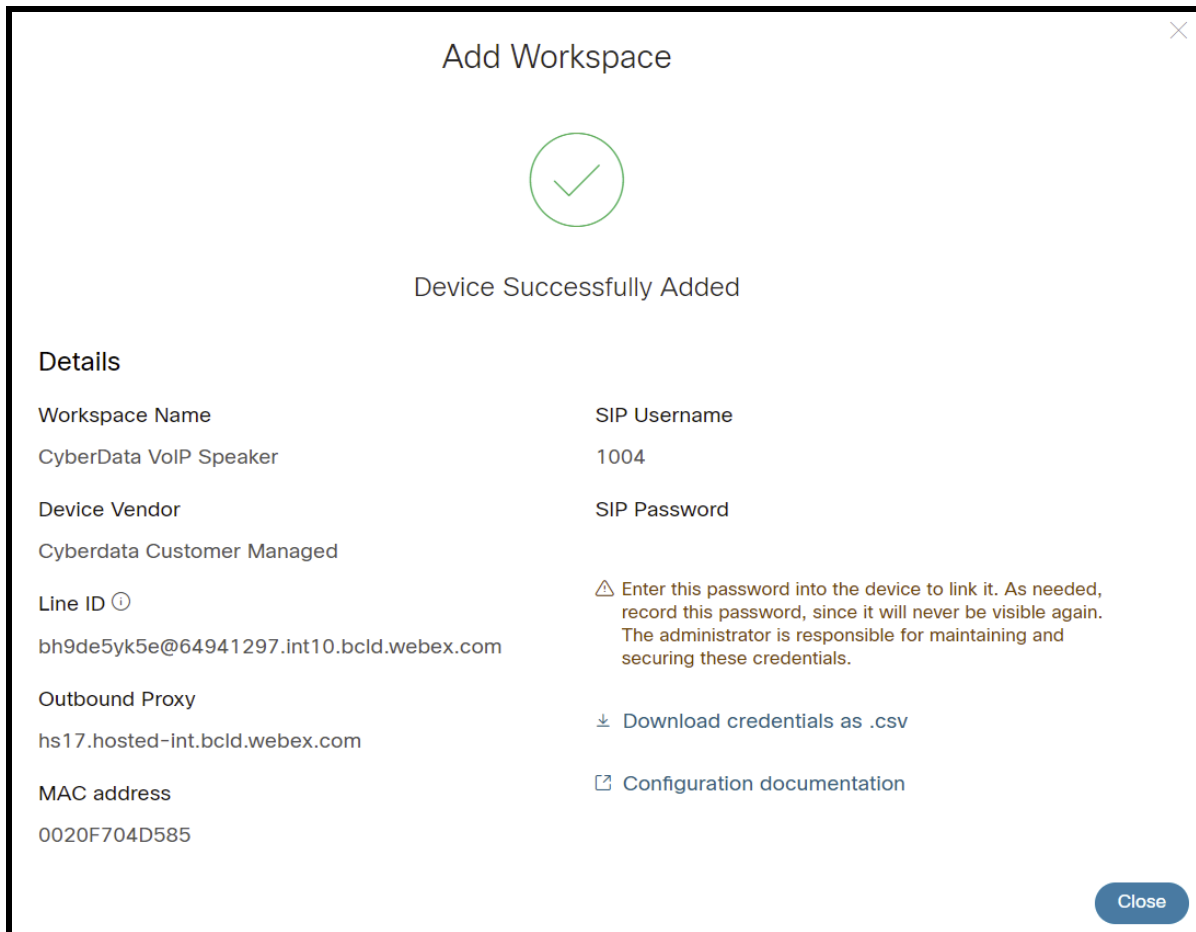
Note: The password has been obscured.

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

4.0 Setting up the CyberData VoIP SIP/Multicast Speaker

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
2nd Half of Line ID	Primary SIP Server
1st 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.
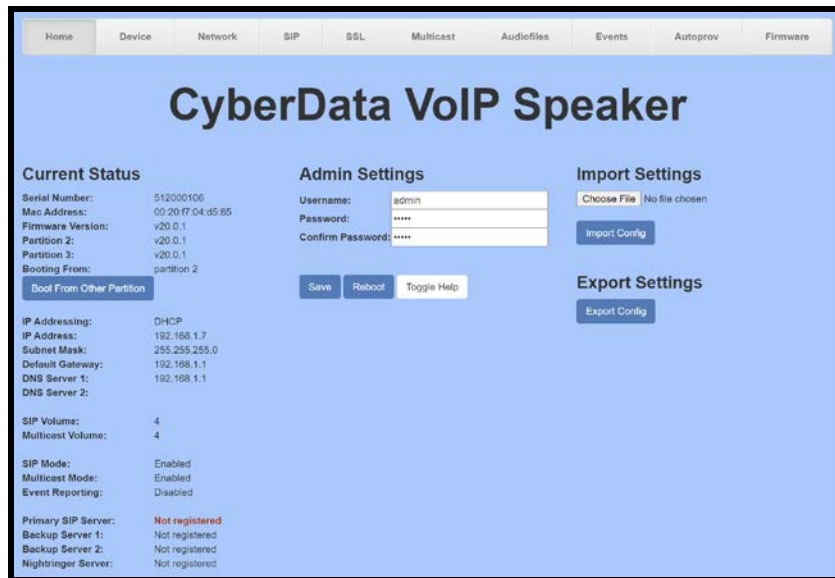
CyberData's default login credentials are:
Username: admin
Password: admin

1. Log into the web interface of the CyberData device.

Figure 4-1: Home Tab

CyberData Corporation
3 Justin Court, Monterey, CA 93940
www.cyberdata.net
P 831.373.2601 | F 831.373.4193

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 Extension Number.
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

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 Using the CyberData VoIP Speaker in a Webex Calling system.

CyberData VoIP SIP/Multicast Speakers are designed with IP Paging in mind. Supporting both SIP and Multicast that allows the speakers to work with individual addressability or mass notification scenarios.

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.

CyberData devices also have an Emergency Multicast Priority, priority 9, which will always play at max volume regardless of setting, by design.

Figure 5-1: Multicast Tab

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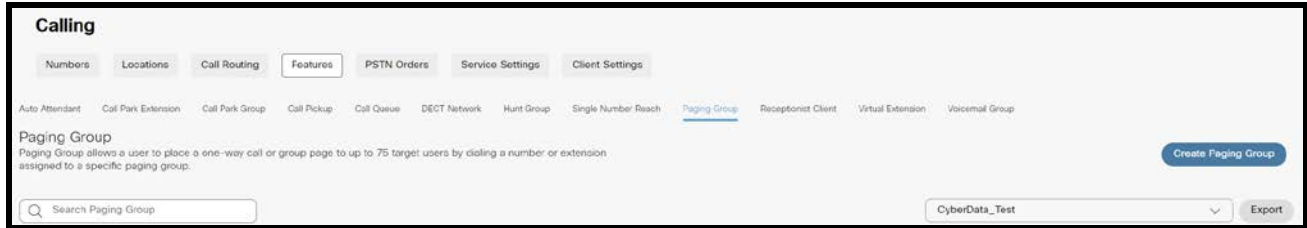
1. Select Calling from the Services sub section in the sidebar.

Figure 5-2: Select Calling
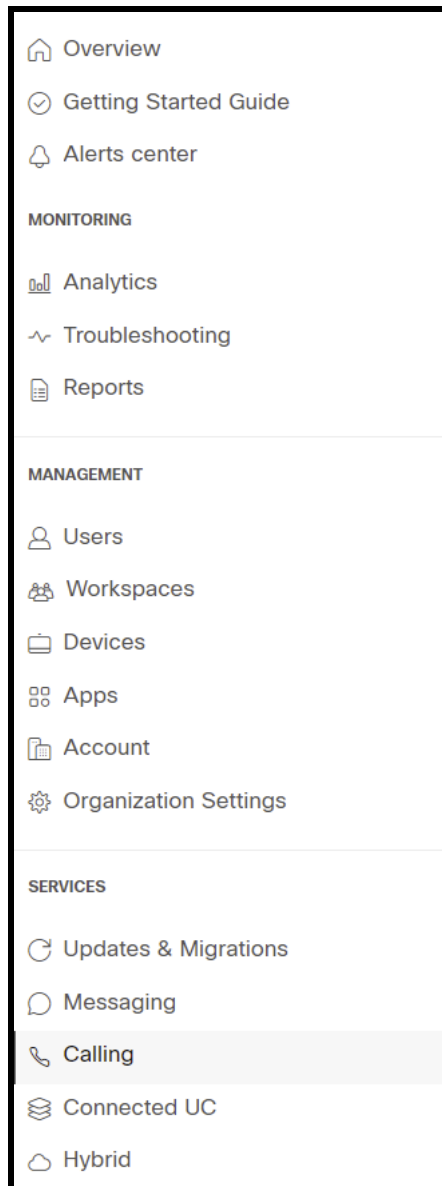
2. From the Calling page select **Features** and then **Paging Group.**

Figure 5-3: Calling Settings

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

Figure 5-4: 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 5-5: Set the Paging Targets

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

Figure 5-6: Paging Originators
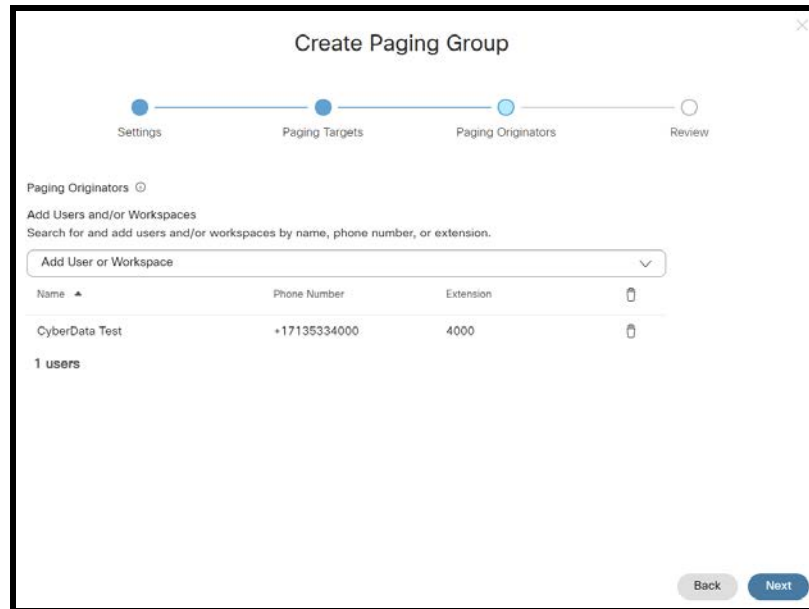
13. Choose which numbers can page to the paging group.
14. Press **Next**.
15. Review the settings and press **Create**.

Figure 5-7: Review Settings
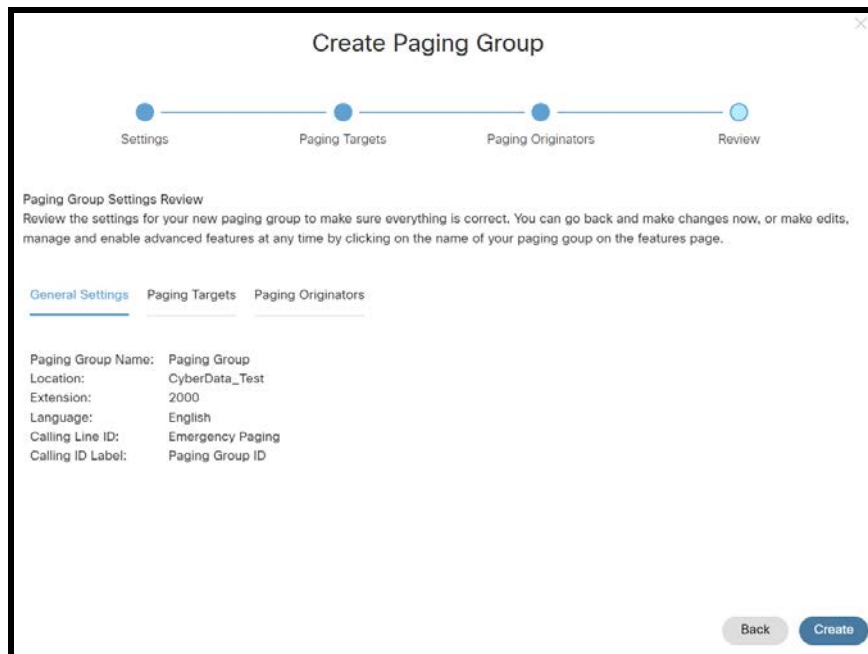
6.0 Setup Diagram

Figure 6-1: Interoperability Test Infrastructure

Webex Calling

Router Firewall

Linksys SRW208MP

CyberData VoIP SIP/Multicast Speaker

Cisco 8865
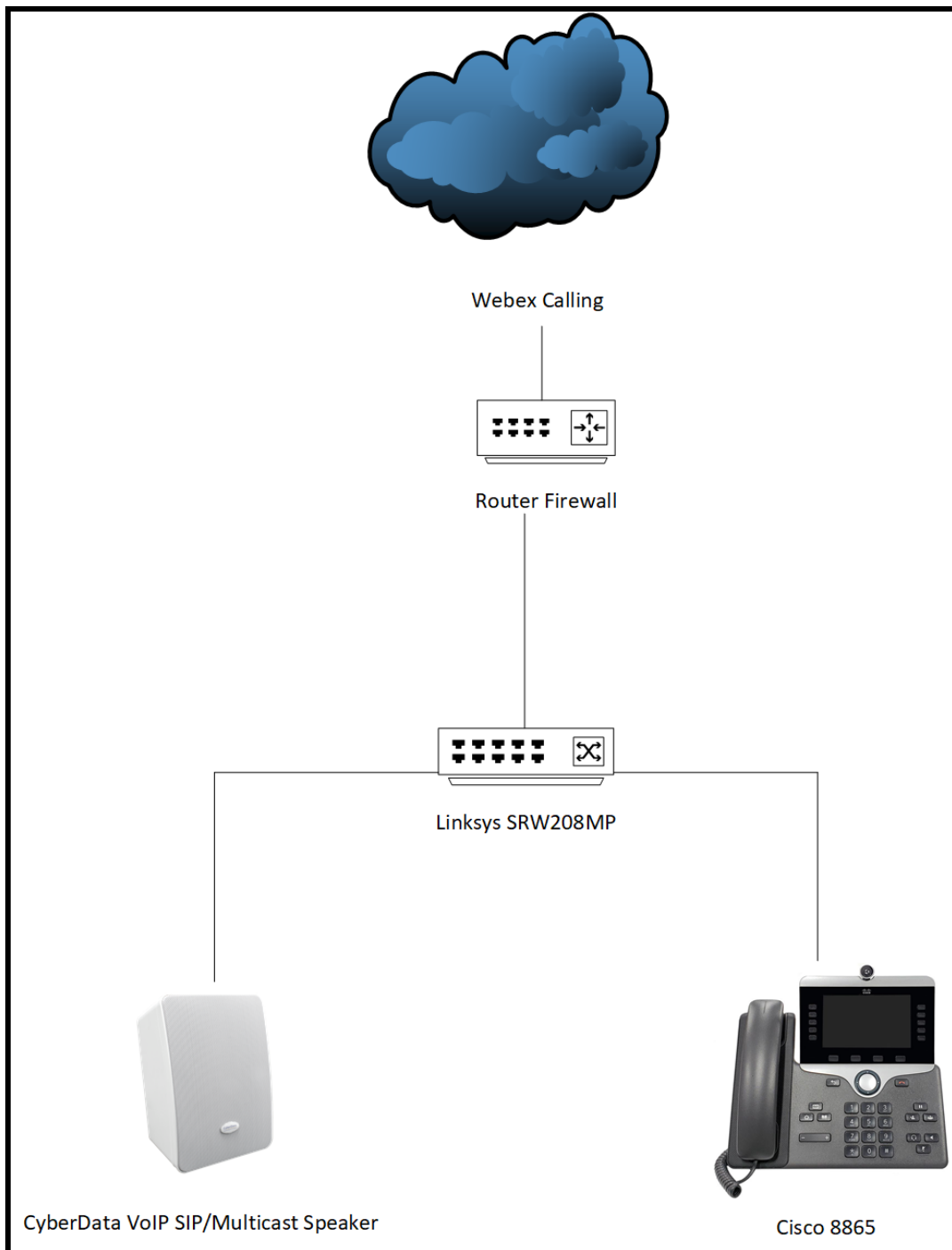
7.0 FAQ

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

CyberData device's 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.