

# CyberData

The IP Endpoint Company



## *Wildix Configuration Guide: Intercoms*

Document Part # 931890A

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

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**Wildix Configuration Guide: Intercoms  
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## Revision Information

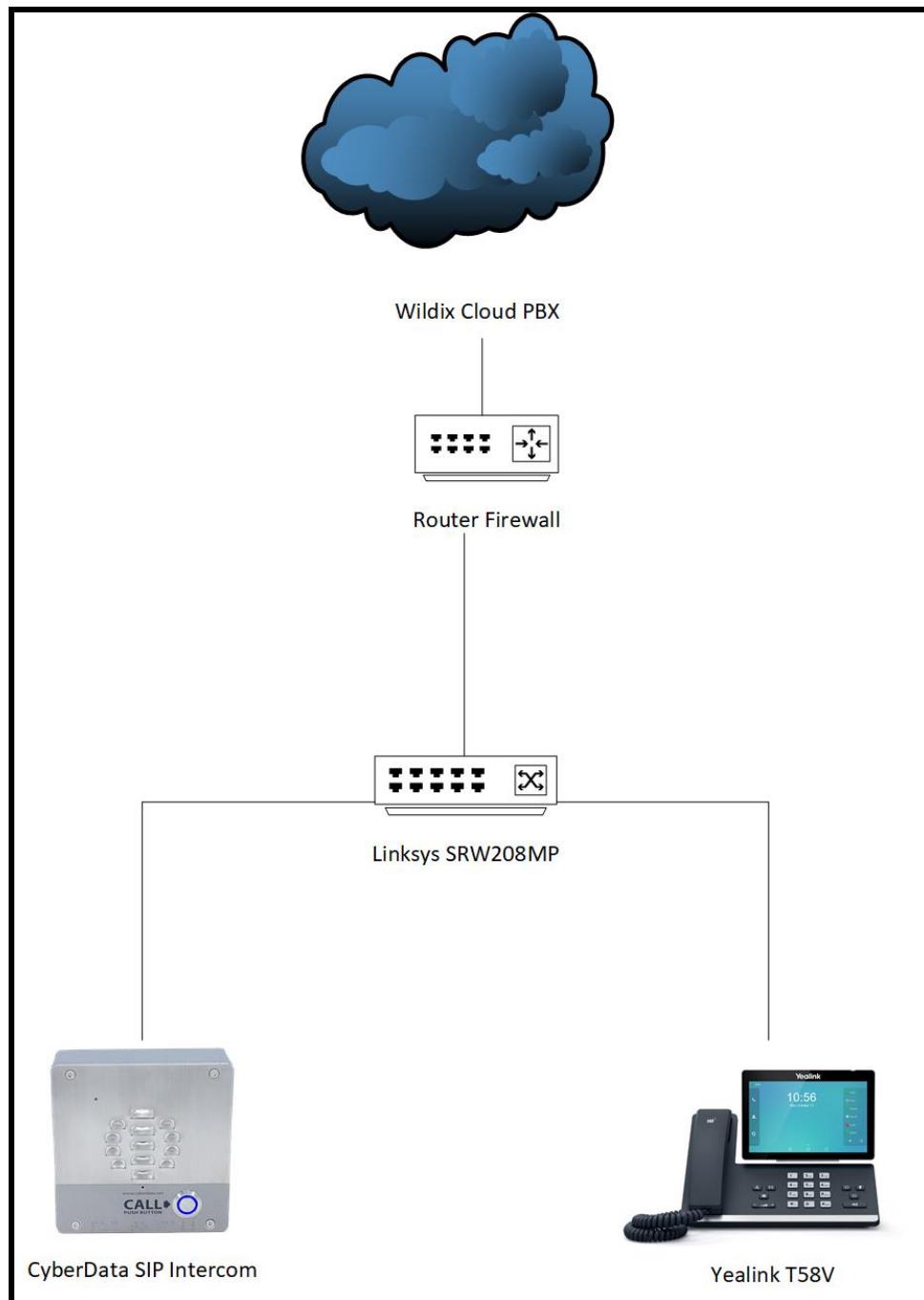
- 10/7/2021 – Initial Release

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## 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 Wildix.

**Table 2-1: Setup Equipment**

EQUIPMENT	MODEL or PART NUMBER	FIRMWARE VERSION
CYBERDATA OUTDOOR INTERCOM	011186	20.1.0
CYBERDATA OUTDOOR KEYPAD INTERCOM	011214	20.0.0
CYBERDATA INDOOR INTERCOM	011211	20.0.0
CYBERDATA H.264 VIDEO INTERCOM*	011410	1.4.1
CYBERDATA H.264 VIDEO INTERCOM WITH KEYPAD*	011414	1.4.1
CYBERDATA OUTDOOR INTERCOM WITH RFID	011477	1.0.0
CYBERDATA H.264 VIDEO INTERCOM WITH RFID*	011478	1.1.0
SIP EMERGENCY INTERCOM	011209	20.0.0
YEALINK	T58A	58.83.3.6
LINKSYS SWITCH	SRW208MP	---

\*At the time of writing video does not work properly with Wildix, this is an issue with CyberData's video intercom devices not Wildix. Due to this issue, the Video Intercom's are not recommended.

## 3.0 Before You Start

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

### Network Advisories

Wildix uses a Fully Qualified Domain Name (FQDN) for the SIP server address. The CyberData SIP Intercom needs to perform a DNS A query to resolve the IP address of Wildix'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 button to use:

- UDP 5060 (SIP)
- UDP 10500 (RTP)

The intercom will need to traverse the public internet in order to operate with Wildix in the cloud.

The intercom's paging extension uses SIP port 5060 to receive SIP messages. The paging extension will send SIP messages to port 5060, the port used by Wildix's SIP Server.

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

Alternatively, SIP ports for the paging extension 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 intercom's product webpage:

Outdoor Intercom ([011186](#)):

[https://files.cyberdata.net/assets/011186/011186\\_931544E\\_SIP\\_Outdoor\\_Intercom\\_Operations\\_Guide.pdf](https://files.cyberdata.net/assets/011186/011186_931544E_SIP_Outdoor_Intercom_Operations_Guide.pdf)

Outdoor Intercom with Keypad ([011214](#)):

[https://files.cyberdata.net/assets/011214/011214\\_931562B\\_SIP\\_Outdoor\\_Intercom\\_with\\_Keypad\\_Ops\\_Guide.pdf](https://files.cyberdata.net/assets/011214/011214_931562B_SIP_Outdoor_Intercom_with_Keypad_Ops_Guide.pdf)

SIP H.264 Video Outdoor Intercom ([011410](#)):

[http://files.cyberdata.net/assets/011410/011410\\_931334E\\_Video\\_Outdoor\\_Intercom\\_Ops\\_Guide.pdf](http://files.cyberdata.net/assets/011410/011410_931334E_Video_Outdoor_Intercom_Ops_Guide.pdf)

SIP H.264 Video Outdoor Intercom with Keypad ([011414](#)):

[http://files.cyberdata.net/assets/011414/011414\\_931338E\\_Video\\_Outdoor\\_Keypad\\_Intercom\\_Ops\\_Guide.pdf](http://files.cyberdata.net/assets/011414/011414_931338E_Video_Outdoor_Keypad_Intercom_Ops_Guide.pdf)

SIP Outdoor Intercom with RFID ([011477](#)):

[http://files.cyberdata.net/assets/011477/011477\\_931663A\\_Outdoor\\_Intercom\\_with\\_RFID\\_Ops\\_Guide.pdf](http://files.cyberdata.net/assets/011477/011477_931663A_Outdoor_Intercom_with_RFID_Ops_Guide.pdf)

SIP H.264 Video Outdoor Intercom with RFID ([011478](#)):

[http://files.cyberdata.net/assets/011478/011478\\_931667A\\_Outdoor\\_Video\\_Intercom\\_with\\_RFID\\_Ops\\_Guide.pdf](http://files.cyberdata.net/assets/011478/011478_931667A_Outdoor_Video_Intercom_with_RFID_Ops_Guide.pdf)

SIP Indoor Intercom ([011211](#)):

[http://files.cyberdata.net/assets/011211/011211\\_931604A\\_Indoor\\_Intercom\\_Ops\\_Guide.pdf](http://files.cyberdata.net/assets/011211/011211_931604A_Indoor_Intercom_Ops_Guide.pdf)

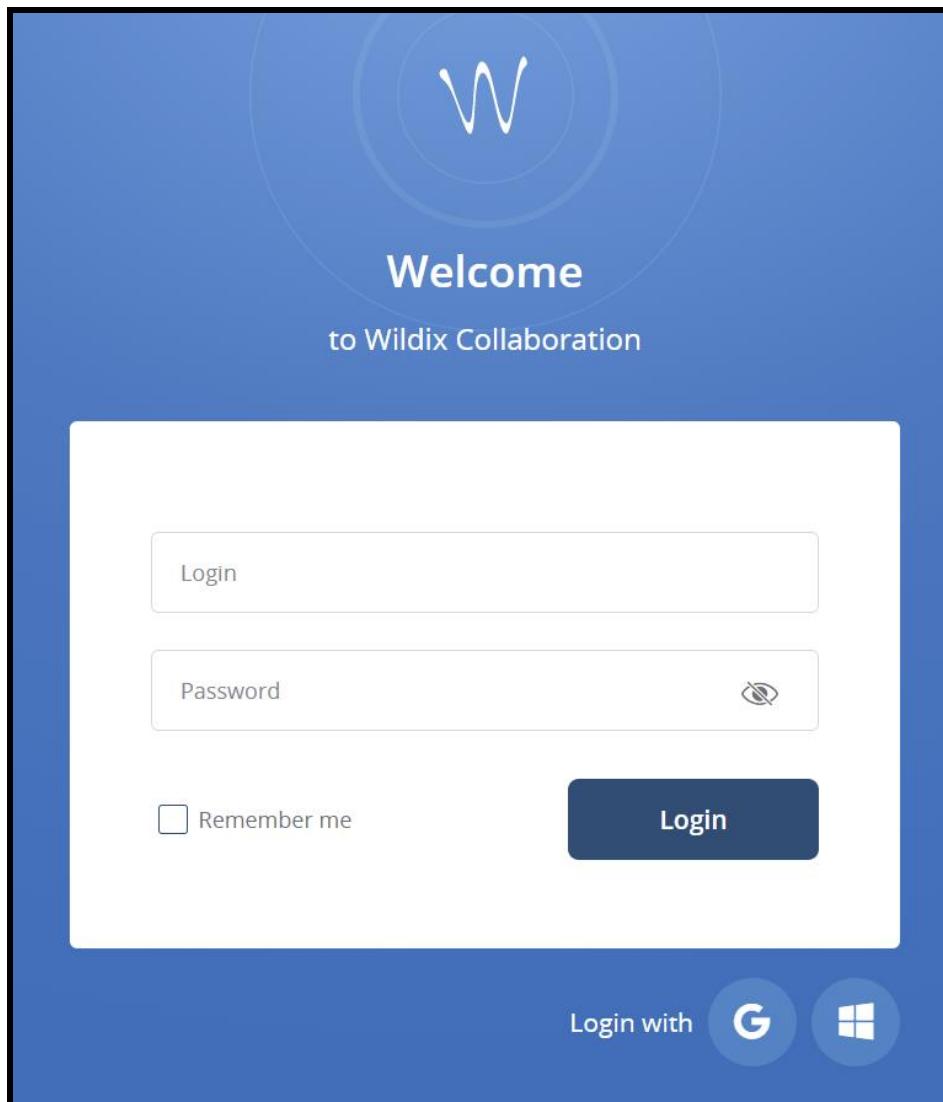
SIP Emergency Intercom ([011209](#))

[https://files.cyberdata.net/assets/011209/011209\\_931600A\\_Emergency\\_Intercom\\_Ops\\_Guide.pdf](https://files.cyberdata.net/assets/011209/011209_931600A_Emergency_Intercom_Ops_Guide.pdf)

## 4.0 Configuration Procedure: Extension Creation

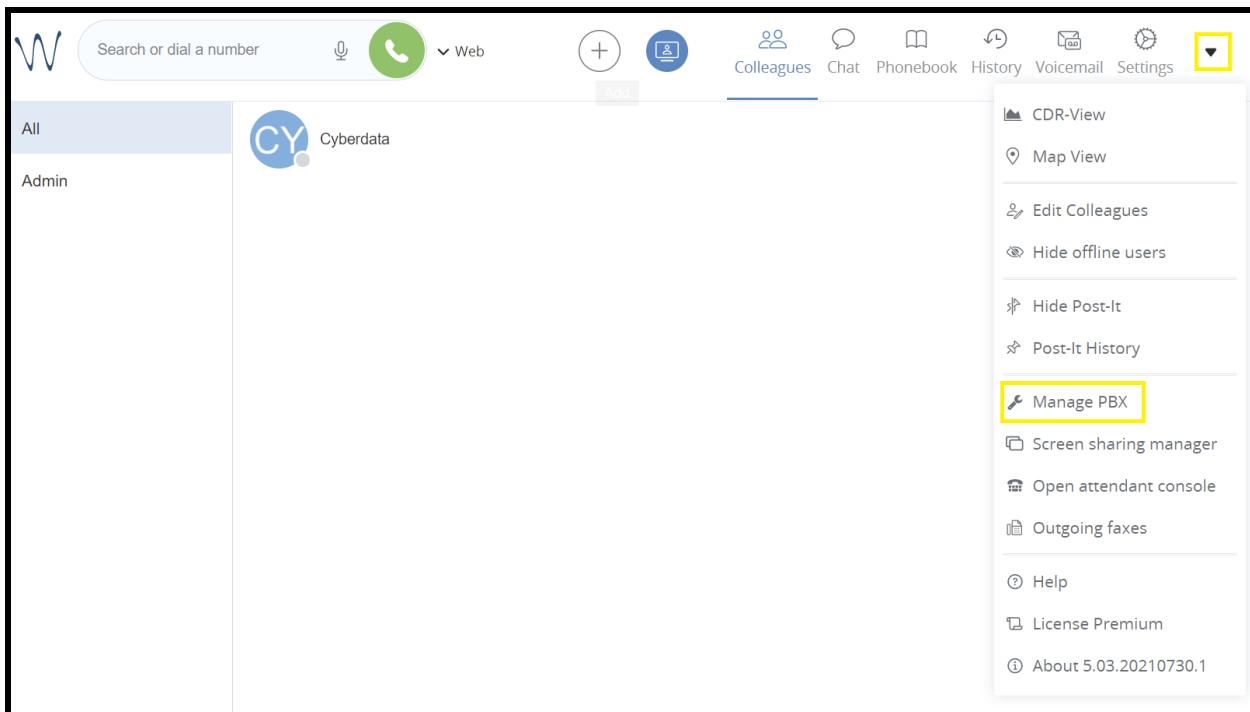
1. Log into Wildix.

**Figure 4-1: Log into Wildix**



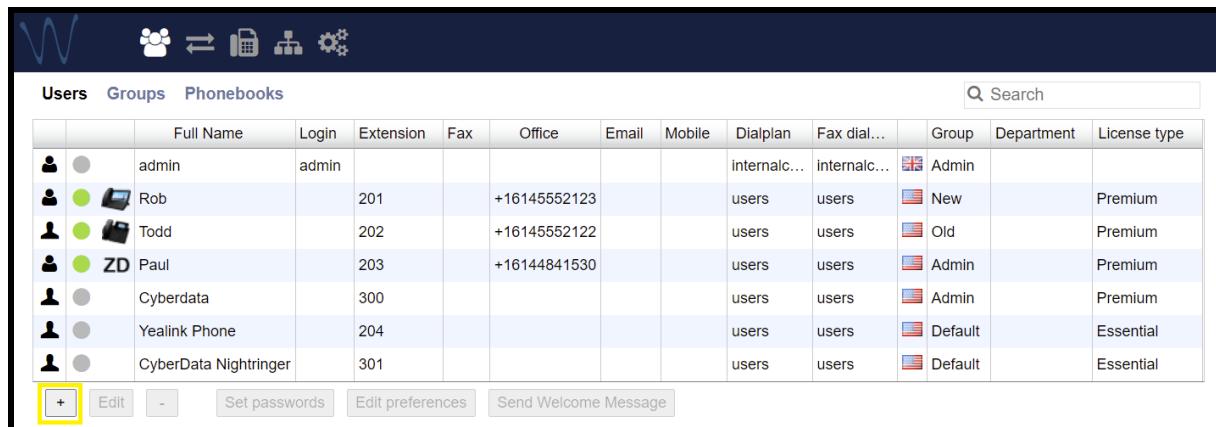
2. From the landing page select the **Other** down arrow button and pick **Manage PBX**.

**Figure 4-2: Manage PBX page**



- On the Manage PBX page press the + button to add a new extension.

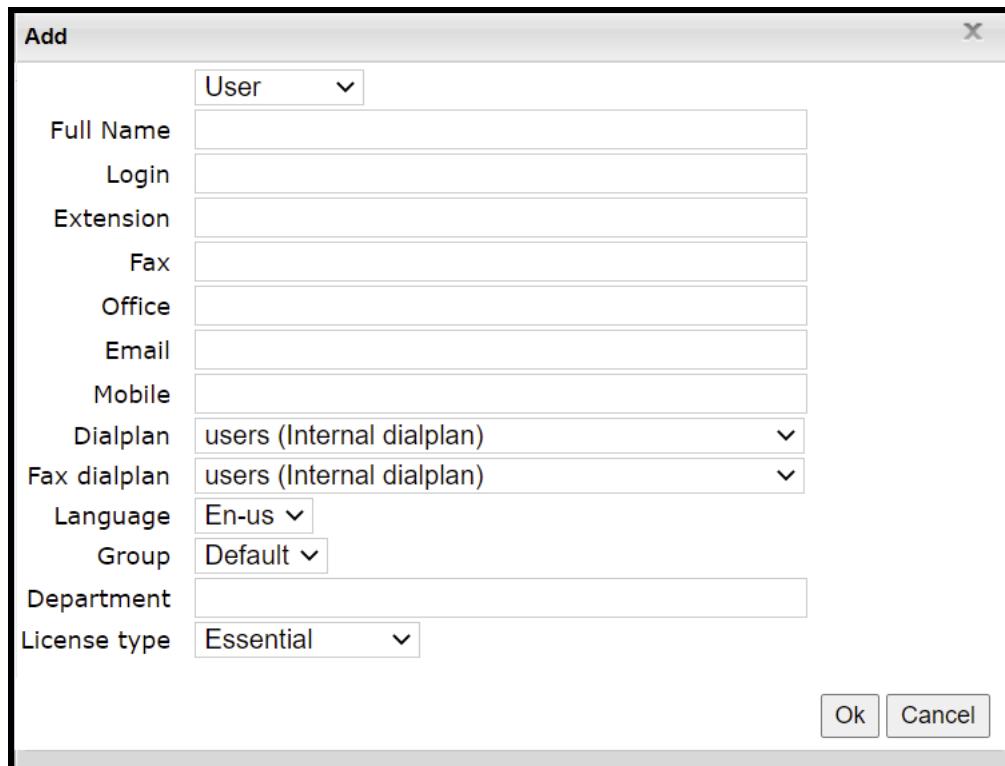
**Figure 4-3: Manage PBX**



	Full Name	Login	Extension	Fax	Office	Email	Mobile	Dialplan	Fax dial...	Group	Department	License type
admin	admin	admin						internalc...	internalc...	Admin		
Rob			201		+16145552123			users	users	New		Premium
Todd			202		+16145552122			users	users	Old		Premium
ZD Paul			203		+16144841530			users	users	Admin		Premium
Cyberdata			300					users	users	Admin		Premium
Yealink Phone			204					users	users	Default		Essential
CyberData Nightringer			301					users	users	Default		Essential

- A pop-up to create the extension will appear.

**Figure 4-4: Extension creation**



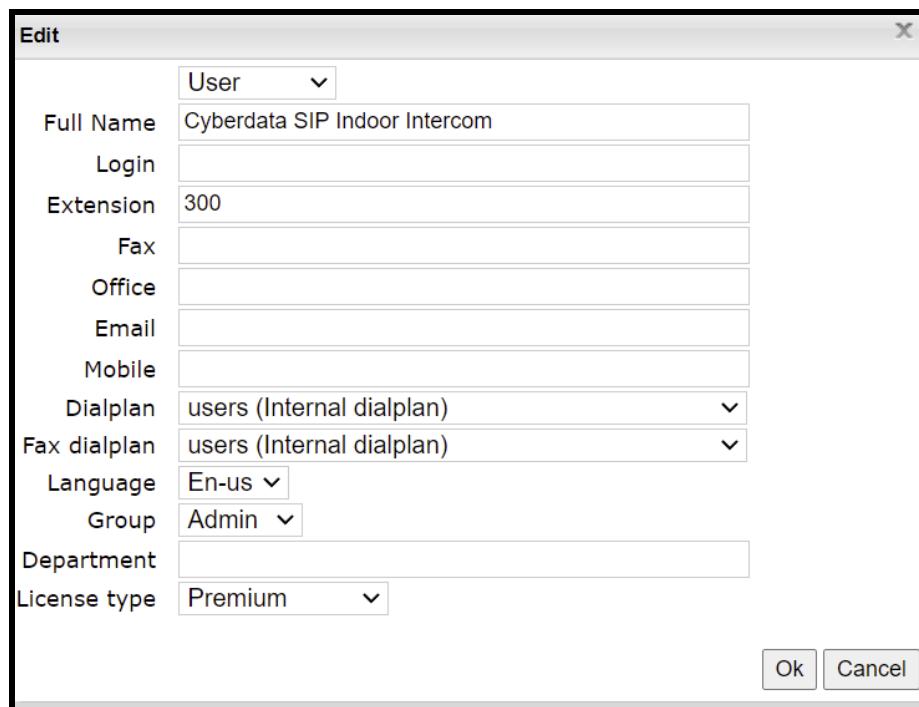
The dialog box contains the following fields:

- User dropdown menu (highlighted)
- Full Name
- Login
- Extension
- Fax
- Office
- Email
- Mobile
- Dialplan: users (Internal dialplan)
- Fax dialplan: users (Internal dialplan)
- Language: En-us
- Group: Default
- Department
- License type: Essential
- Ok and Cancel buttons

5. Make sure the drop-down menu has **User** selected.
6. Set the full name to the location of the intercom.
7. Set the **Extension Number** desired for the device.

**Note:** Other values can be set, but for the purposes of this guide all other fields are left blank.

**Figure 4-5: Filled Extension Popup**



8. Press **Ok** to save the extension.
9. After creating the extension, select it out of the list.

**Figure 4-6: Extension Created**

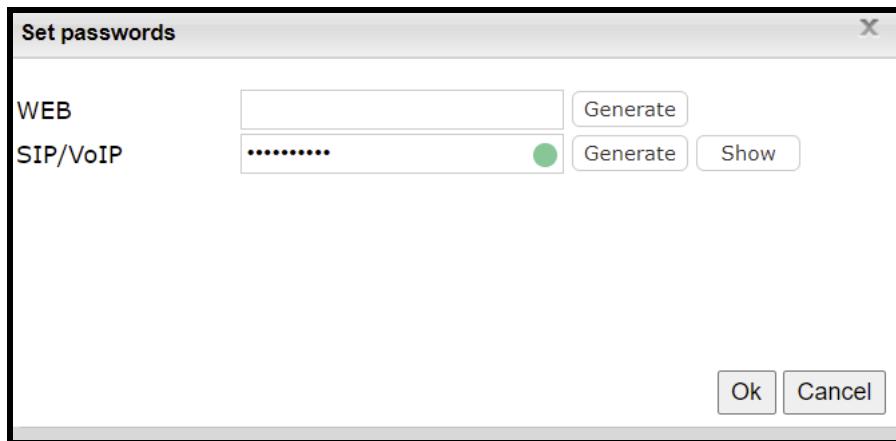
		Full Name	Login	Extension	Fax	Office	Email	Mobile	Dialplan	Fax dial...	Group	Department	License type
•	•	admin	admin						internalc...	internalc...	Admin		
•	•	Rob		201	+16145552123				users	users	New		Premium
•	•	Todd		202	+16145552122				users	users	Old		Premium
•	• ZD	Paul		203	+16144841530				users	users	Admin		Premium
•	•	Cyberdata SIP Indoor Inter...		300					users	users	Admin		Premium
•	•	Yealink Phone		204					users	users	Default		Essential
•	•	CyberData Nightringer		301					users	users	Default		Essential

+ Edit - Set passwords Edit preferences Send Welcome Message

**10.** After selecting the extension, press **Set Passwords**.

**11.** Click on the **Generate** button to create a password.

**Figure 4-7: Set Passwords Popup**



**12.** Click the show button and copy the auto-generated password which will be required in the next section.

## 5.0 Configuration Procedure: Setting up the Paging Extension

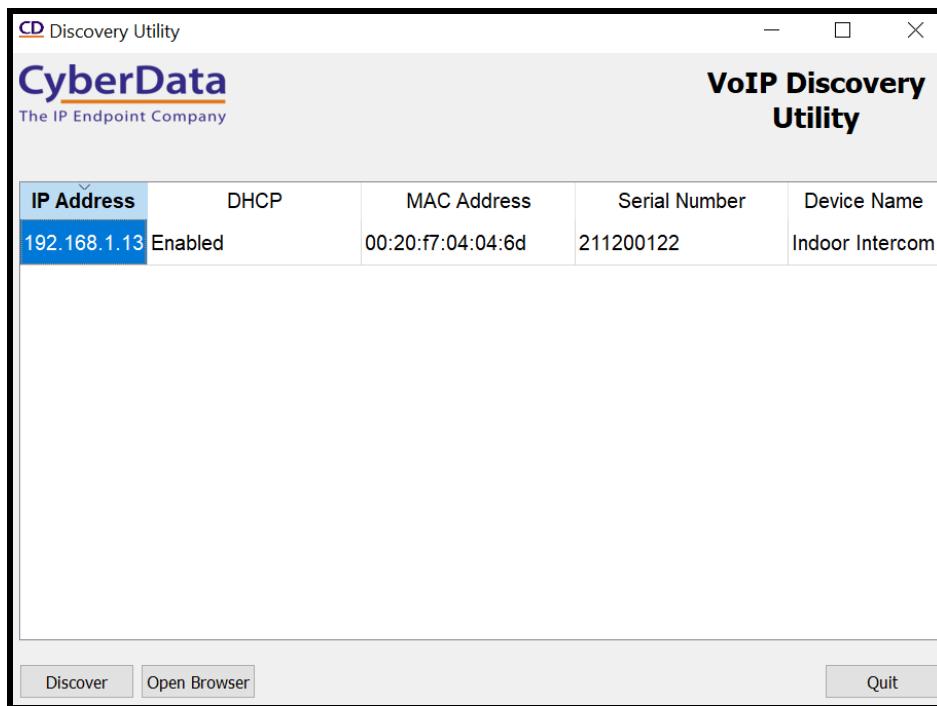
If you are configuring through the web interface, use the following steps to login to the web interface of your CyberData device.

**Table 5-1:** Setting Name correlation

CyberData Setting	Wildix Provisioning Pop-up
Primary SIP Server	SIP Domain
Primary SIP User ID	Extension Number
Primary SIP Auth ID	Extension Number
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.

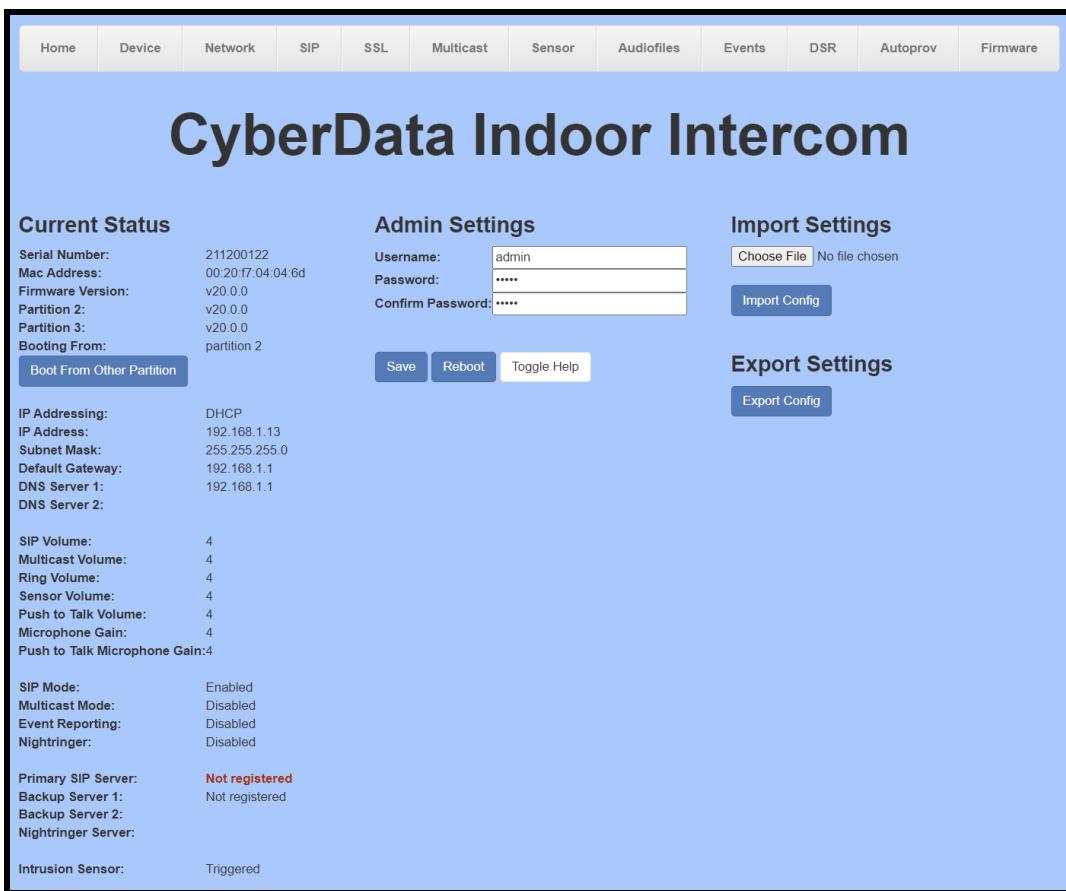
**Figure 5-1:** CyberData Discovery Utility



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.

**Figure 5-4: SIP Tab**

**SIP Settings**

Enable SIP operation:

Register with a SIP Server:

Primary SIP Server: wildixstudent9.wildixin.com

Primary SIP User ID: 300

Primary SIP Auth ID: 300

Primary SIP Auth Password: .....

Re-registration Interval (in seconds): 360

Backup SIP Server 1:

Backup SIP User ID:

Backup SIP Auth ID:

Backup SIP Auth Password:

Re-registration Interval (in seconds): 360

Backup SIP Server 2:

Backup SIP User ID:

Backup SIP Auth ID:

Backup SIP Auth Password:

Re-registration Interval (in seconds): 360

Remote SIP Port: 5060

Local SIP Port: 5060

SIP Transport Protocol: UDP

TLS Version: 1.2 only (recommended)

Verify Server Certificate:

Outbound Proxy:

Outbound Proxy Port: 0

Use Cisco SRST:

Disable rport Discovery:

Unregister on Boot:

Keep Alive Period: 0

**Nightringer Settings**

SIP Server:

SIP User ID:

SIP Auth ID:

SIP Auth Password:

Re-registration Interval (in seconds): 360

**Dial Out Settings**

Dial out Extension: 204

Extension ID: id204

Send Multicast Audio:

Multicast Address: 224.5.5.5

Multicast Port: 5050

Repeat Message: 1

**Call Disconnection**

Terminate Call after delay: 0

**Audio Codec Selection**

Codec: Auto Select

**RTP Settings**

RTP Port (even): 10500

Jitter Buffer: 50

**Buttons**

Save Reboot Toggle Help

4. Set the **Primary SIP Server** to the FQDN of the Wildix Server.
5. Set the **Primary SIP User ID** to the extension number.
6. Set the **Primary SIP Auth ID** to the extension number.
7. Set the **Primary SIP Auth Password** to the auto-generated password from the previous section.
8. Set the **Keep Alive Period** to 0.
9. Save.
10. Reboot.

Once the unit reboots it should be registered with Wildix.

**Figure 5-5: Home Page – Registered**

The screenshot displays the CyberData Indoor Intercom's web-based configuration interface. At the top, a navigation bar includes links for Home, Device, Network, SIP, SSL, Multicast, Sensor, Audiofiles, Events, DSR, Autoprov, and Firmware. The main title "CyberData Indoor Intercom" is centered above three main sections: "Current Status", "Admin Settings", and "Import Settings", "Export Settings".

**Current Status:**

- Serial Number: 211200122
- Mac Address: 00:20:f7:04:04:6d
- Firmware Version: v20.0.0
- Partition 2: v20.0.0
- Partition 3: v20.0.0
- Booting From: partition 2
- Boot From Other Partition** (button)
- IP Addressing: DHCP
- IP Address: 192.168.1.13
- Subnet Mask: 255.255.255.0
- Default Gateway: 192.168.1.1
- DNS Server 1: 192.168.1.1
- DNS Server 2:
- SIP Volume: 4
- Multicast Volume: 4
- Ring Volume: 4
- Sensor Volume: 4
- Push to Talk Volume: 4
- Microphone Gain: 4
- Push to Talk Microphone Gain: 4
- SIP Mode: Enabled
- Multicast Mode: Disabled
- Event Reporting: Disabled
- Nightringer: Disabled
- Primary SIP Server: **Registered**
- Backup Server 1: Not registered
- Backup Server 2:
- Nightringer Server:
- Intrusion Sensor: Triggered

**Admin Settings:**

- Username: admin
- Password: **.....**
- Confirm Password: **.....**

**Import Settings:**

- Choose File (No file chosen)
- Import Config (button)

**Export Settings:**

- Export Config (button)

Buttons at the bottom include Save, Reboot, and Toggle Help.

## 6.0 Configuration Procedure: Setting up the Nightringer Extension

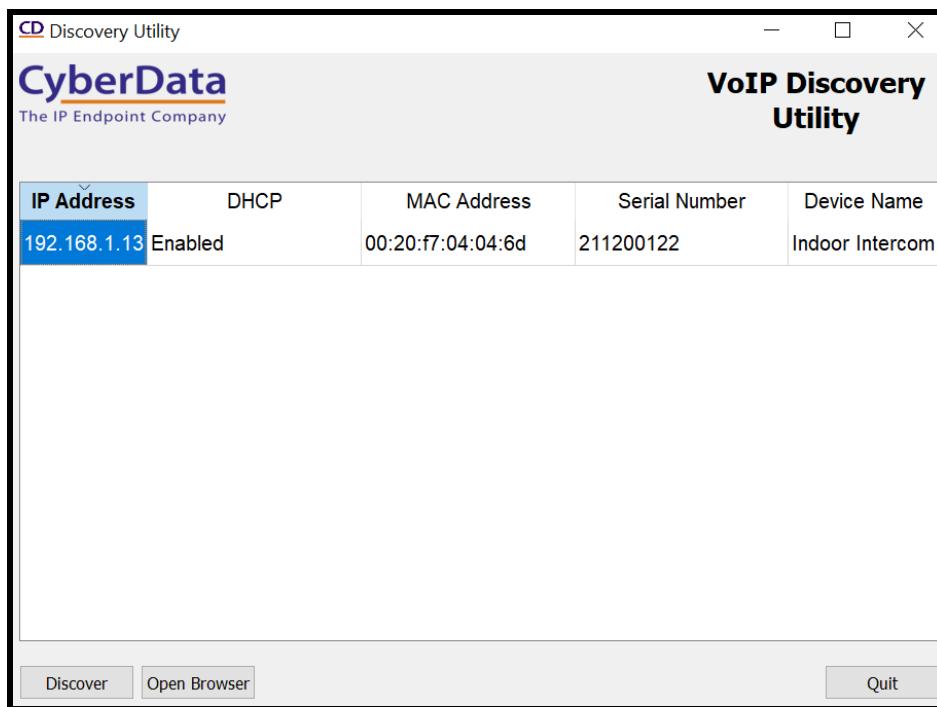
If you are configuring through the web interface, use the following steps to login to the web interface of your CyberData device.

**Table 6-1: Setting Name correlation**

CyberData Setting	Wildix Provisioning Pop-up
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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.

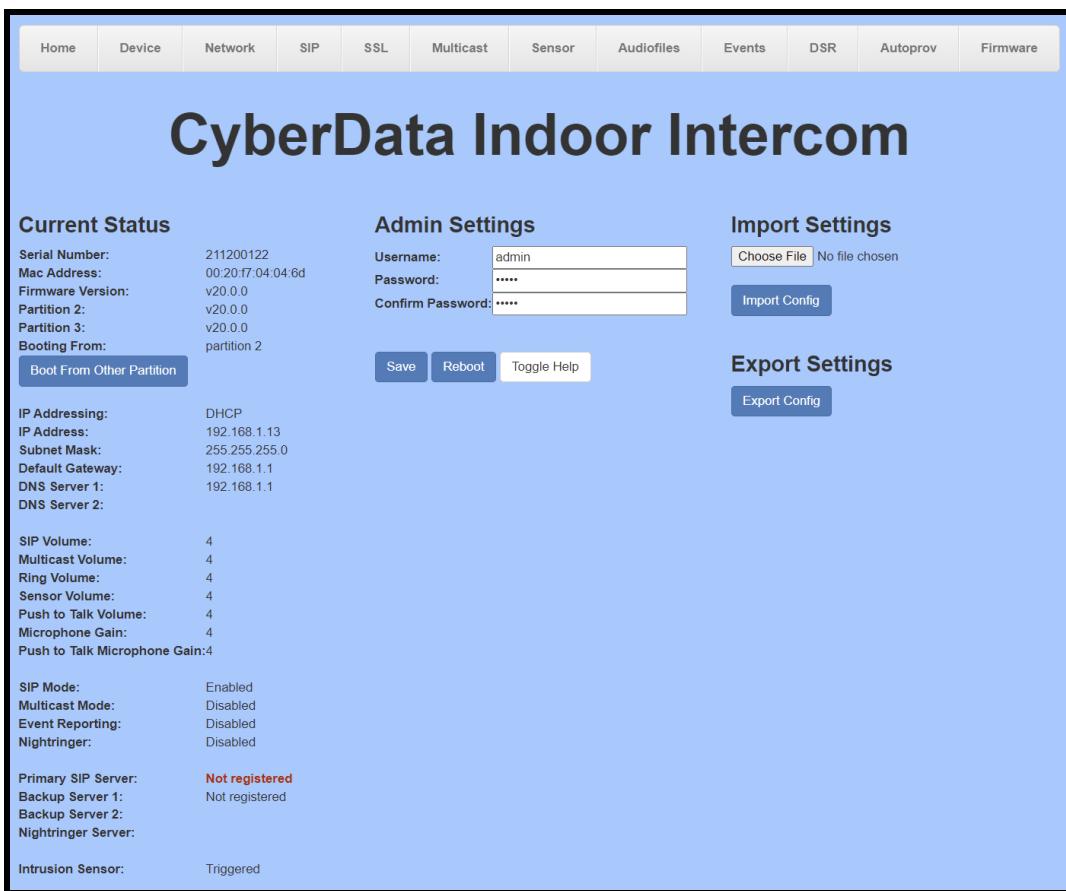
**Figure 6-1: CyberData Discovery Utility**



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

Username: admin  
Password: admin

**Figure 6-2: Home Tab**



3. Navigate to the SIP Tab.

**Figure 6-4: SIP Tab**

4. Set the **SIP Server** to the FQDN of the Wildix Server.
5. Set the **SIP User ID** to the extension number.
6. Set the **SIP Auth ID** to the extension number.
7. Set the **SIP Auth Password** to the auto-generated password from the previous section.
8. Set the **Keep Alive Period** to 0.
9. Save.
10. Reboot.

Once the unit reboots it should be registered with Wildix.

## 7.0 Using the CyberData Intercom in a Wildix system.

CyberData SIP Intercoms are designed for making two-way calls. The button can call an extension number, ring group/call queue, or send multicast audio. When the call button is pressed it will make a call to the configured number and play a pre-recorded WAV File.

### 7.1 Setting the Dialout extension

Once the Intercom is registered with Wildix the Dialout extension will need to be configured. The Dialout extension is set on the SIP tab.

**Figure 7-1: Set Dialout Extension**

The screenshot shows the configuration interface for a CyberData Indoor Intercom. The top navigation bar includes Home, Device, Network, SIP, SSL, Multicast, Sensor, Audiofiles, Events, DSR, Autoprov, and Firmware tabs. The main title is "CyberData Indoor Intercom".

**SIP Settings**

- Enable SIP operation:
- Register with a SIP Server:
- Primary SIP Server: wildixstudent9.wildixin.com
- Primary SIP User ID: 300
- Primary SIP Auth ID: 300
- Primary SIP Auth Password: \*\*\*\*\*
- Re-registration Interval (in seconds): 360
- Backup SIP Server 1: (empty)
- Backup SIP User ID: (empty)
- Backup SIP Auth ID: (empty)
- Backup SIP Auth Password: (empty)
- Re-registration Interval (in seconds): 360
- Backup SIP Server 2: (empty)
- Backup SIP User ID: (empty)
- Backup SIP Auth ID: (empty)
- Backup SIP Auth Password: (empty)
- Re-registration Interval (in seconds): 360
- Remote SIP Port: 5060
- Local SIP Port: 5060
- SIP Transport Protocol: UDP
- TLS Version: 1.2 only (recommended)
- Verify Server Certificate:
- Outbound Proxy: (empty)
- Outbound Proxy Port: 0
- Use Cisco SRST:
- Disable rport Discovery:
- Unregister on Boot:
- Keep Alive Period: 0

**Nightringer Settings**

- SIP Server: wildixstudent9.wildixin.com
- SIP User ID: 301
- SIP Auth ID: 301
- SIP Auth Password: \*\*\*\*\*
- Re-registration Interval (in seconds): 360

**Dial Out Settings** (highlighted by a yellow box)

- Dial out Extension: 204
- Extension ID: Lobby Intercom
- Send Multicast Audio:
- Multicast Address: 224.5.5.5
- Multicast Port: 5050
- Repeat Message: 1

**Call Disconnection**

- Terminate Call after delay: 0

**Audio Codec Selection**

- Codec: Auto Select

**RTP Settings**

- RTP Port (even): 10500
- Jitter Buffer: 50

**Buttons**

- Save
- Reboot
- Toggle Help

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