

CyberData

The IP Endpoint Company



Wildix Configuration Guide: Paging Amplifiers



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Revision Information

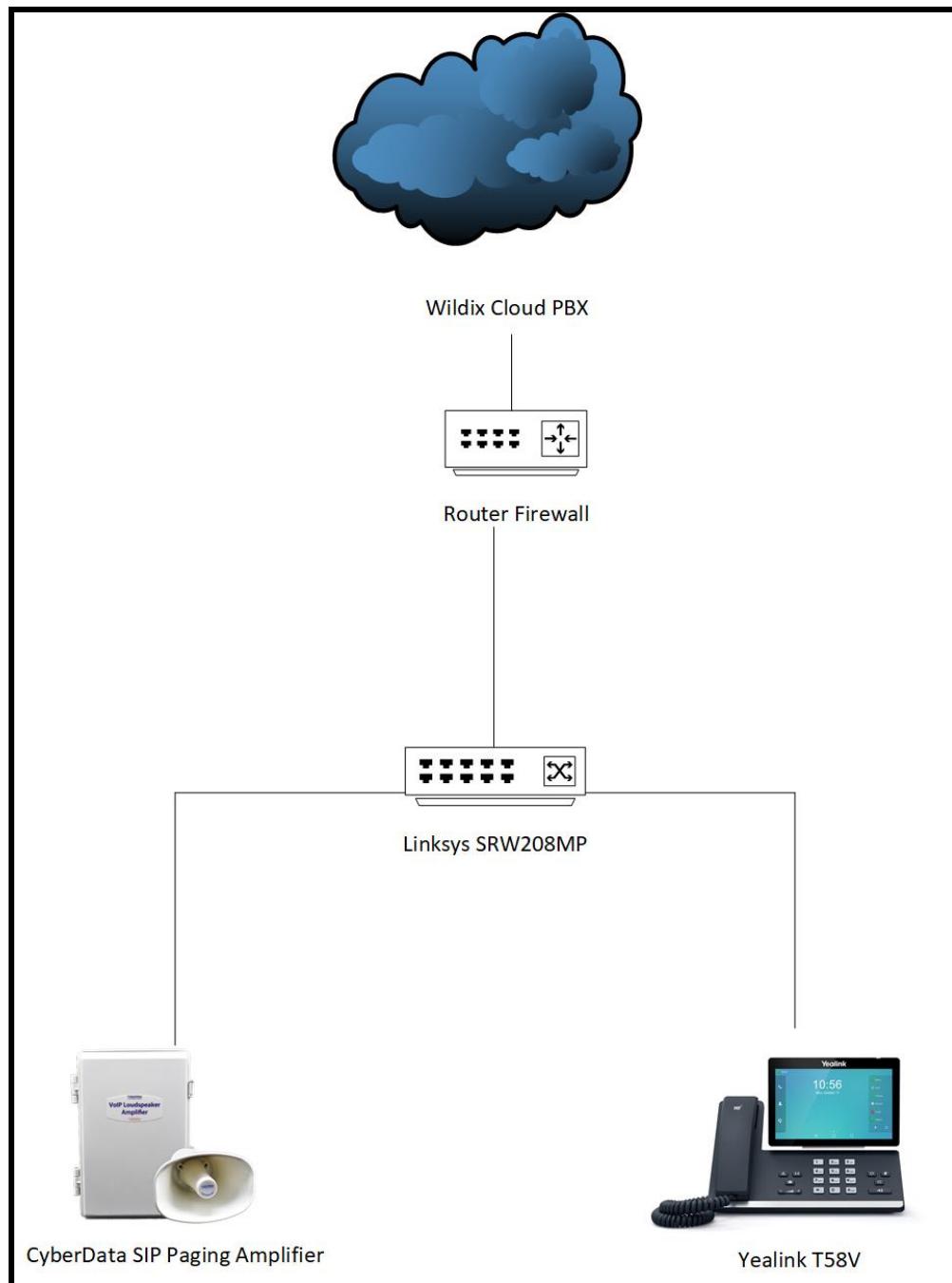
- 10/7/2021 – Initial Release

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: Extension Creation	8
5.0 Configuration Procedure: Setting up the Paging Extension	13
6.0 Configuration Procedure: Setting up the Nightringer Extension.....	17
7.0 Contact CyberData Corporation.....	20

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 SIP PAGING AMPLIFIER	011324	12.1.0
CYBERDATA SIP LOUDSPEAKER AMPLIFIER – AC POWERED	011404	12.1.0
CYBERDATA SIP LOUDSPEAKER AMPLIFIER - POE	011405	12.1.0
CYBERDATA SIP IP66 OUTDOOR HORN	011457	12.1.0
YEALINK	T58A	58.83.3.6
LINKSYS SWITCH	SRW208MP	---

3.0 Before You Start

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

Network Advisories

Wildix uses a Fully Qualified Domain Name (FQDN) for the SIP server address. The CyberData SIP Paging Amplifier 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 amplifier to use:

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

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

The amp'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 amplifier's product webpage:

CyberData SIP Paging Amplifier ([011324](#))

https://files.cyberdata.net/assets/011324/011324_931156L_SIP_Paging_Amplifier_Operations_Guide.pdf

CyberData SIP Loudspeaker Amplifier – AC Powered ([011404](#))

https://files.cyberdata.net/assets/011404/011404_931240O_SIP_Loudspeaker_Amplifier_AC-Powered_Operations_Guide.pdf

CyberData SIP Loudspeaker Amplifier – PoE Powered ([011405](#))

https://files.cyberdata.net/assets/011405/011405_931236M_SIP_Loudspeaker_Amplifier_PoE_Operations_Guide.pdf

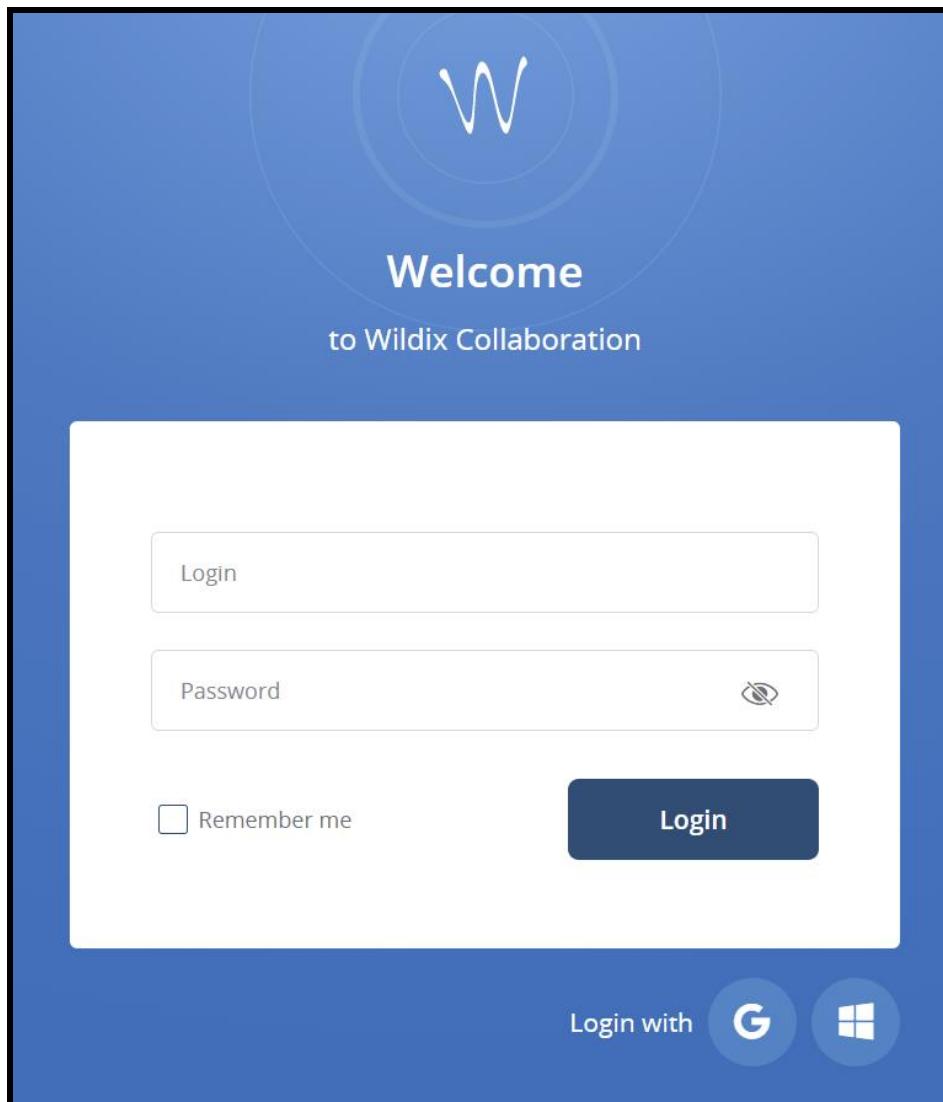
CyberData SIP IP66 Outdoor Horn ([011457](#))

https://files.cyberdata.net/assets/011457/011457_931508D_SIP_IP66_Outdoor_Horn_Speaker_Operations_Guide.pdf

4.0 Configuration Procedure: Extension Creation

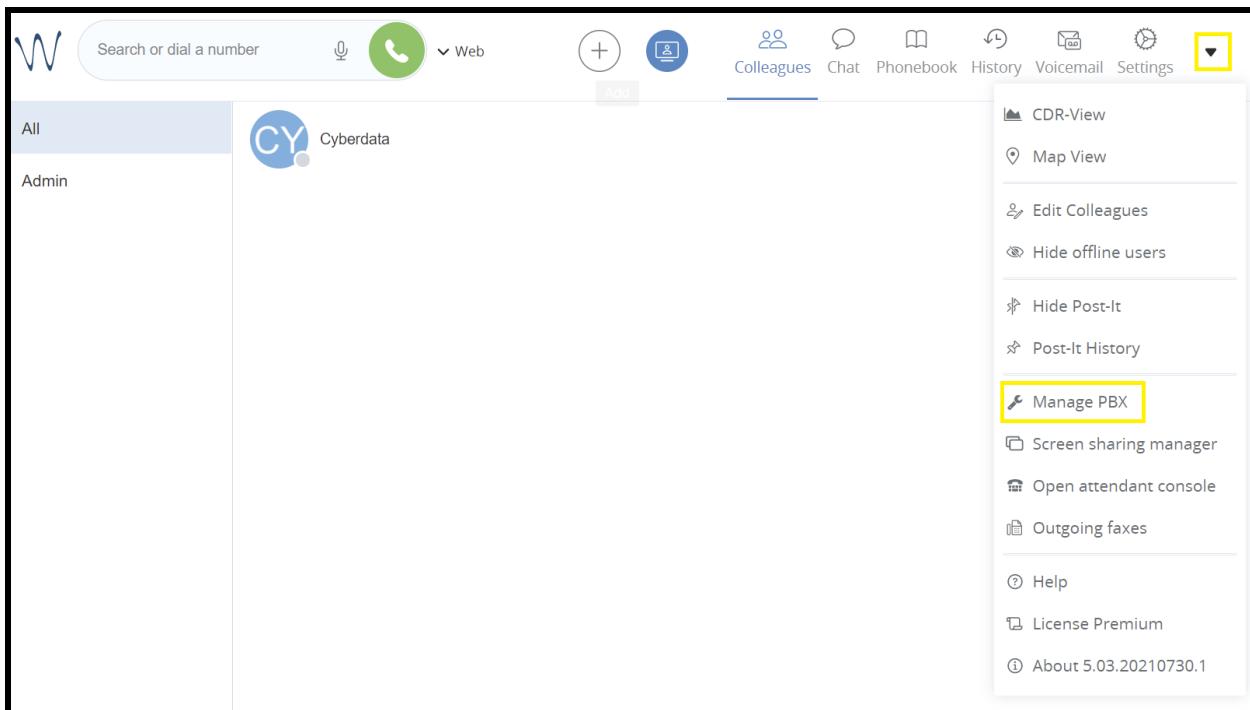
1. Log into Wildix.

Figure 4-1: Log into Wildix



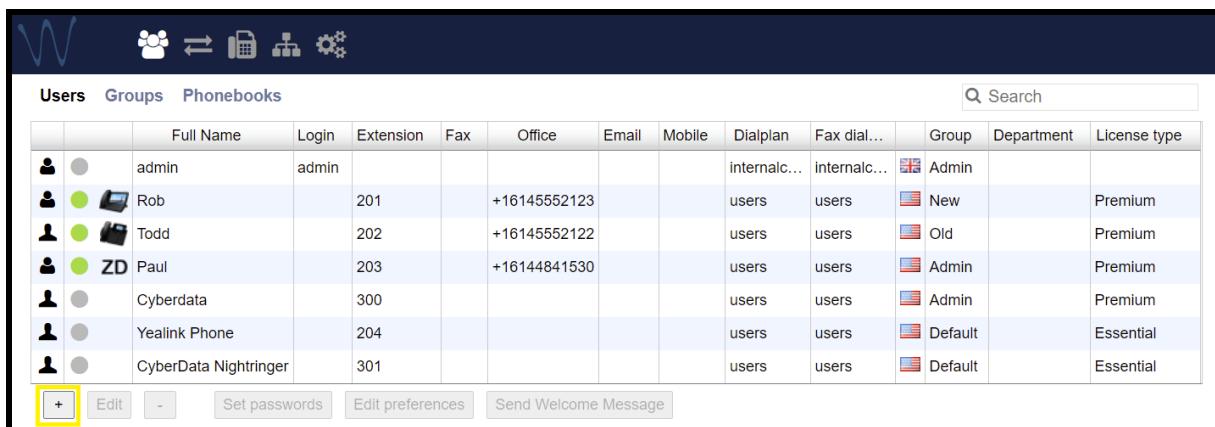
2. From the landing page select the **Other** down arrow button and pick **Manage PBX**.

Figure 4-2: Manage PBX page



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

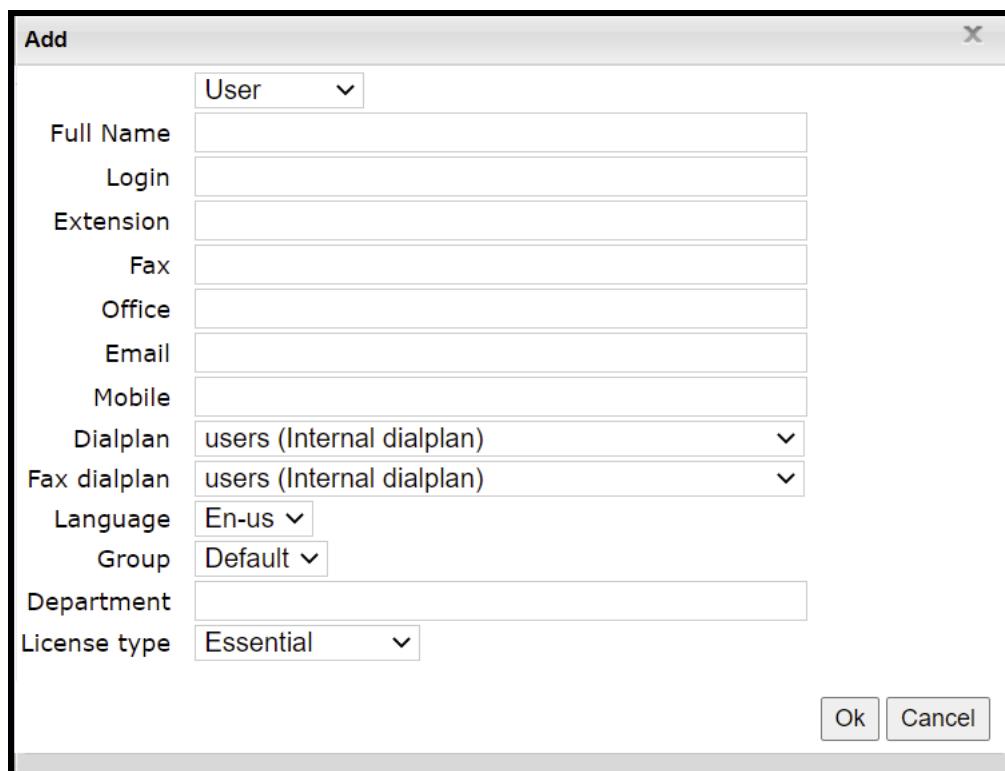
Figure 4-3: Manage PBX



	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



Add

User

Full Name

Login

Extension

Fax

Office

Email

Mobile

Dialplan

Fax dialplan

Language

Group

Department

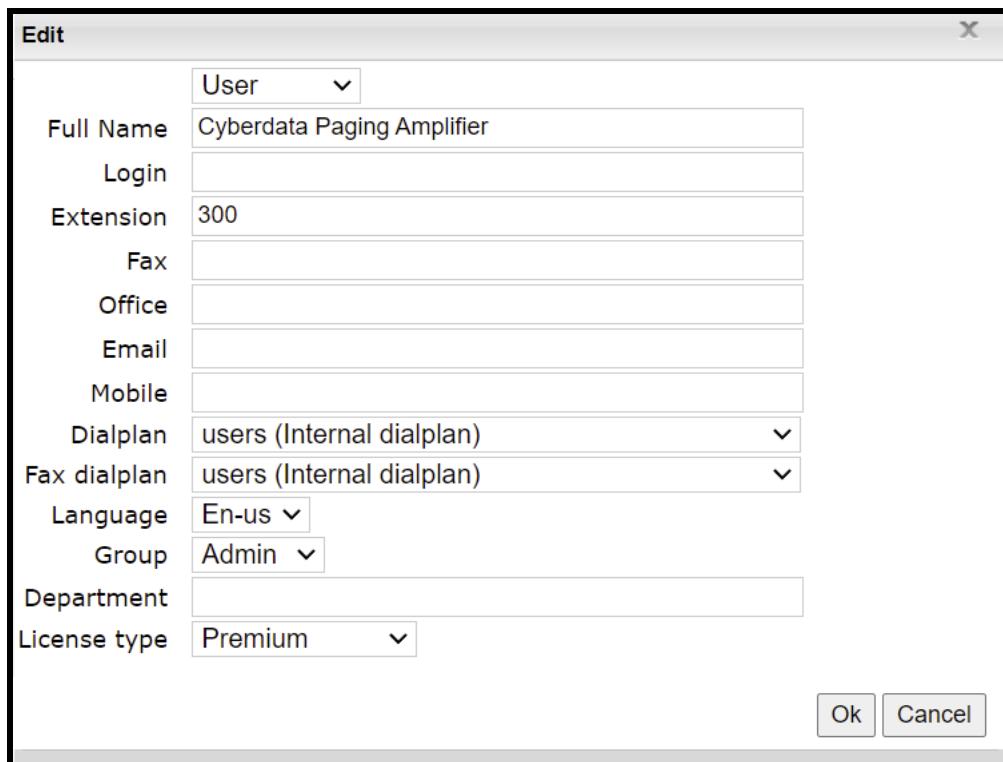
License type

Ok Cancel

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

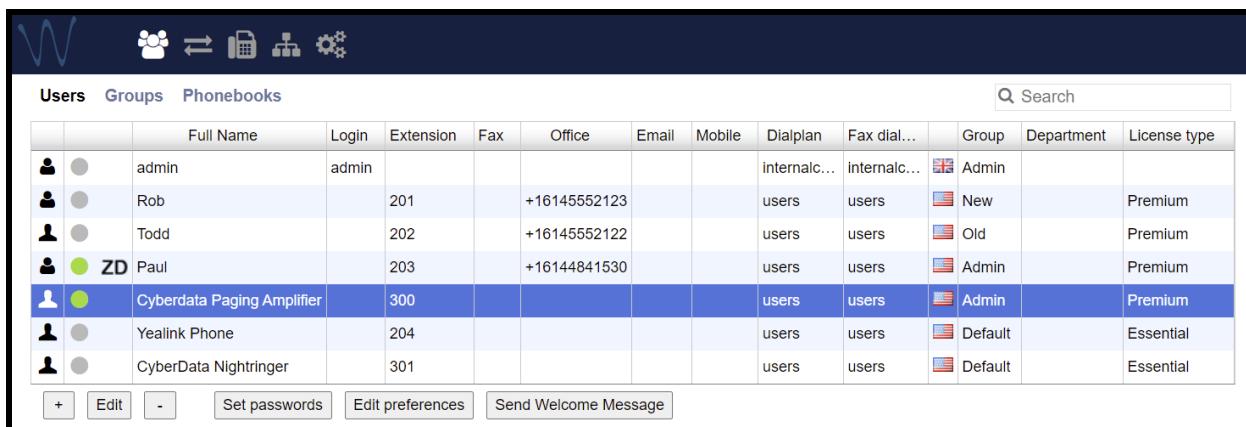
Note: Other values can be set, but for the purposes of this guide all other fields are left blank.

Figure 4-5: Filled Extension Popup



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

Figure 4-6: Common Area Phone Pop-up – Filled



The screenshot shows a user management interface with a table of users. The columns include Full Name, Login, Extension, Fax, Office, Email, Mobile, Dialplan, Fax dial..., Group, Department, and License type. The users listed are:

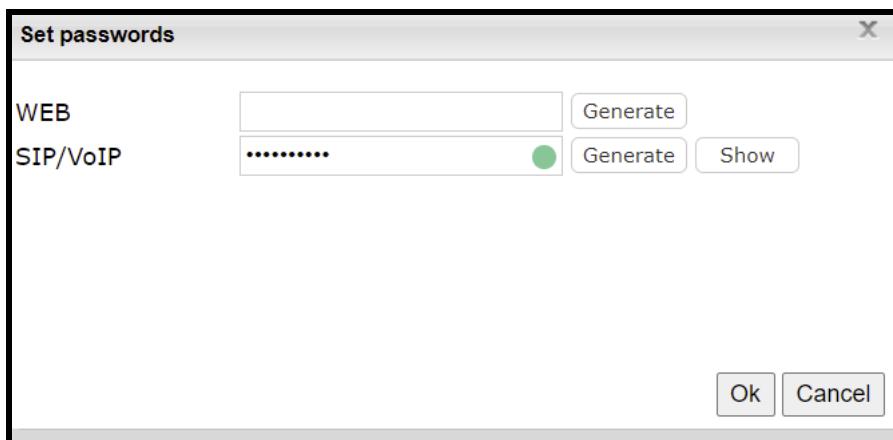
	Full Name	Login	Extension	Fax	Office	Email	Mobile	Dialplan	Fax dial...	Group	Department	License type
admin	admin	admin						internalc...	internalc...	Admin		Premium
Rob			201		+16145552123			users	users	New		Premium
Todd			202		+16145552122			users	users	Old		Premium
ZD Paul	Paul		203		+16144841530	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

Buttons at the bottom include: +, Edit, -, Set passwords, Edit preferences, and 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

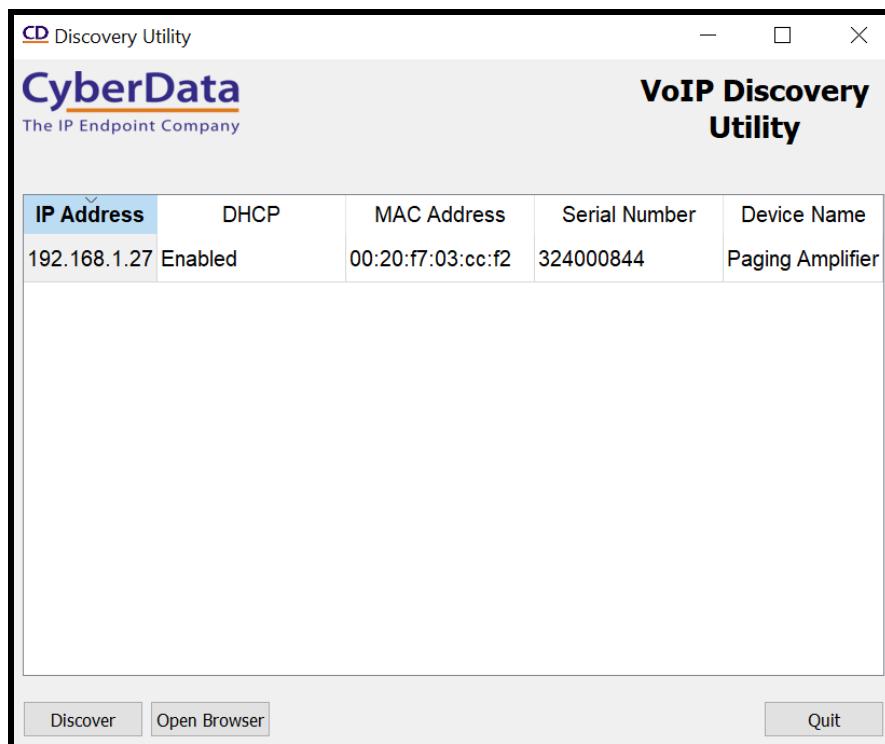
If you are configuring through the web interface, use the following steps to login to the web interface of your CyberData device.

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.

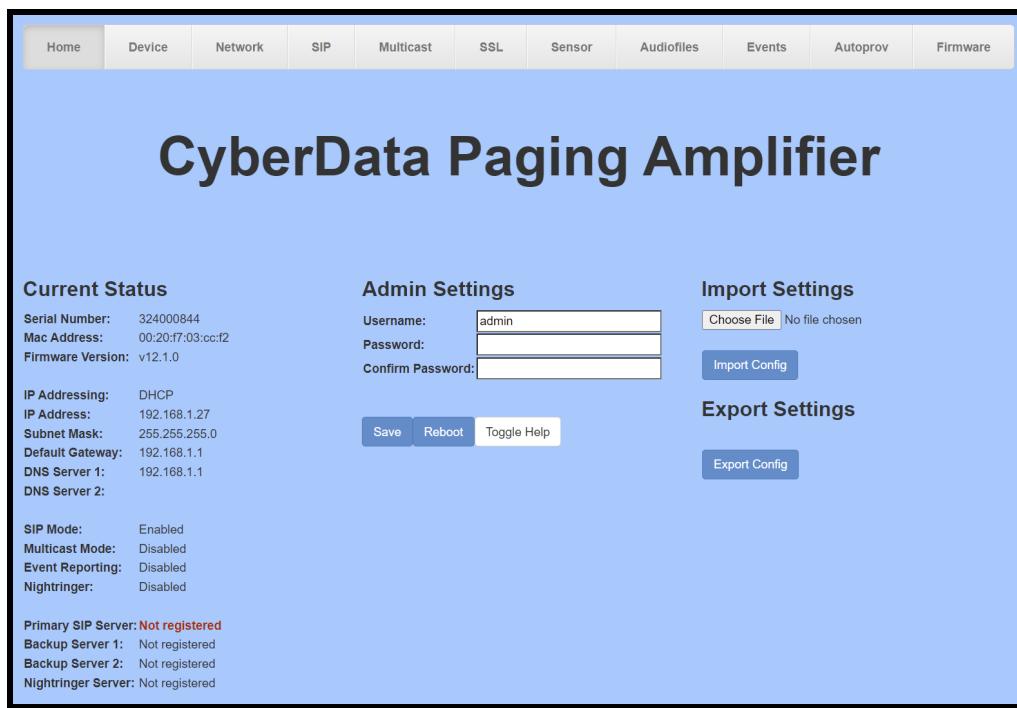
Figure 5-1: CyberData Discovery Utility



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

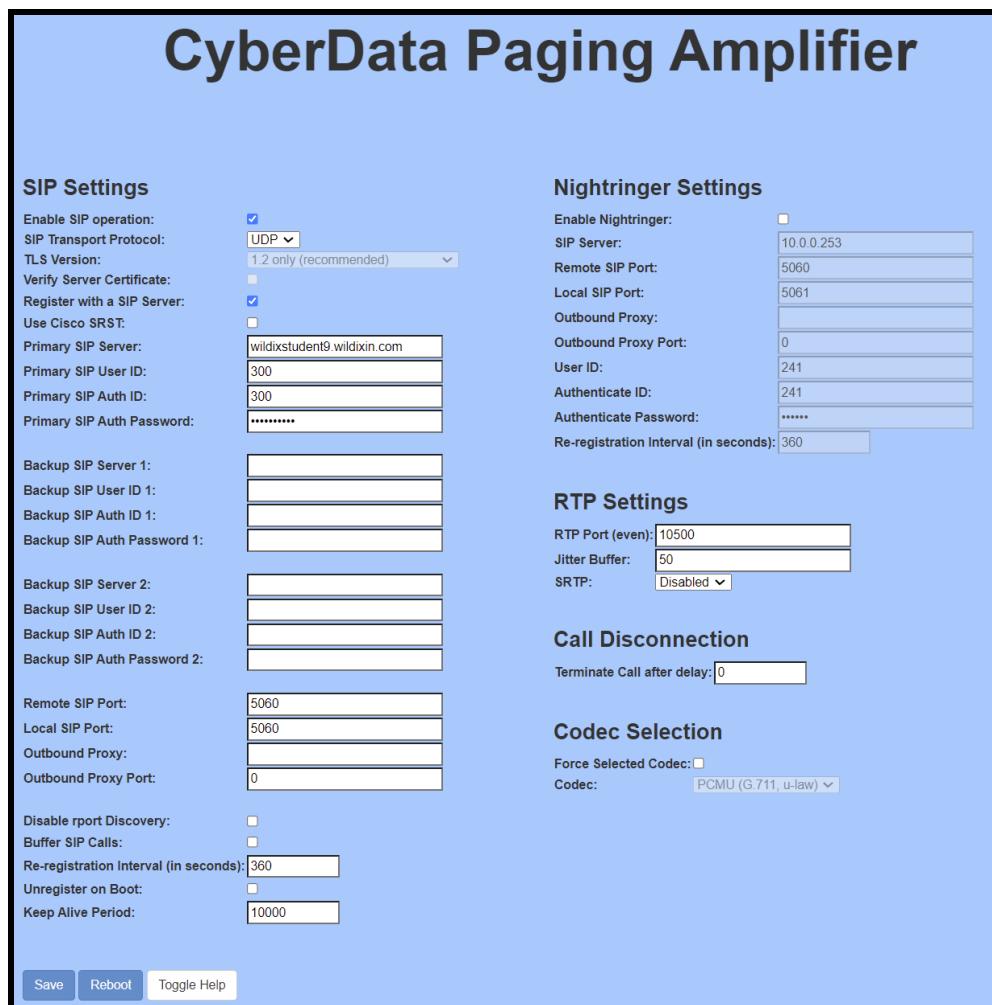
Username: admin
Password: admin

Figure 5-2: Home Tab



3. Navigate to the SIP tab.

Figure 5-3: SIP Tab



4. Set the Primary SIP Server with 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 provisioning pop-up.
8. Save.
9. Reboot.

After the reboot the Paging Amplifier should be registered with Wildix.

Figure 5-4: Home Tab - Registered

The screenshot shows the 'Home' tab selected in a navigation bar at the top. The main content area displays the following sections:

- Current Status:** Shows basic device information:
 - Serial Number: 324000844
 - Mac Address: 00:20:f7:03:cc:f2
 - Firmware Version: v12.1.0
- Admin Settings:** Contains fields for Username (admin), Password, and Confirm Password, along with Save, Reboot, and Toggle Help buttons.
- Import Settings:** A file input field labeled "Choose File" with "No file chosen" and an Import Config button.
- Export Settings:** An Export Config button.
- Network Status:** Shows network configuration:
 - IP Addressing: DHCP
 - IP Address: 192.168.1.27
 - Subnet Mask: 255.255.255.0
 - Default Gateway: 192.168.1.1
 - DNS Server 1: 192.168.1.1
 - DNS Server 2:
- Protocol Status:** Shows SIP Mode: Enabled, Multicast Mode: Disabled, Event Reporting: Disabled, and Nightringer: Disabled.
- Registration Status:** Shows Primary SIP Server: Registered, Backup Server 1: Not registered, Backup Server 2: Not registered, and Nightringer Server: Not registered.

6.0 Configuration Procedure: Setting up the Nightringer Extension

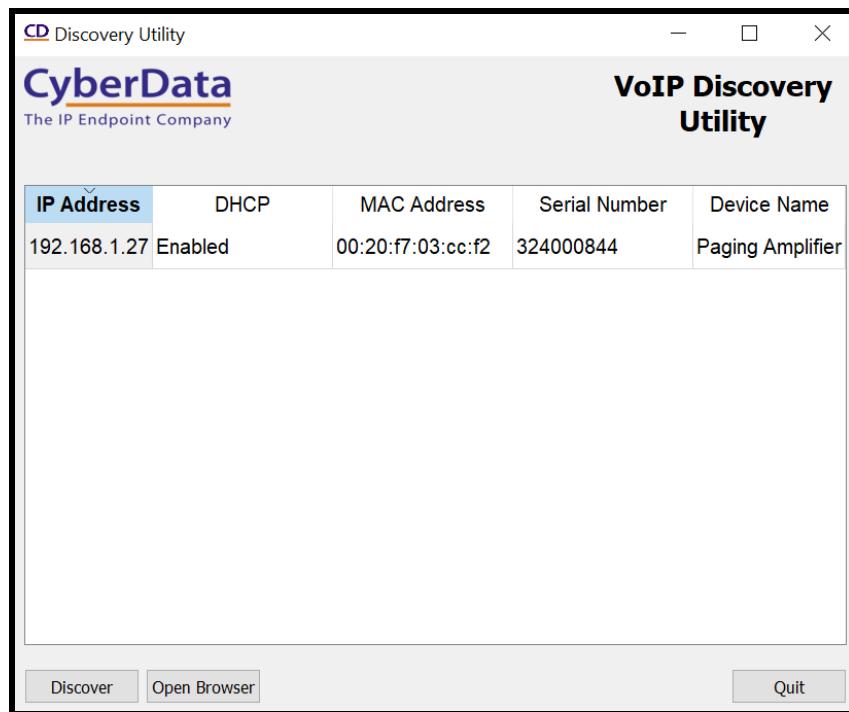
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Table 6-1: Setting Name correlation

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.

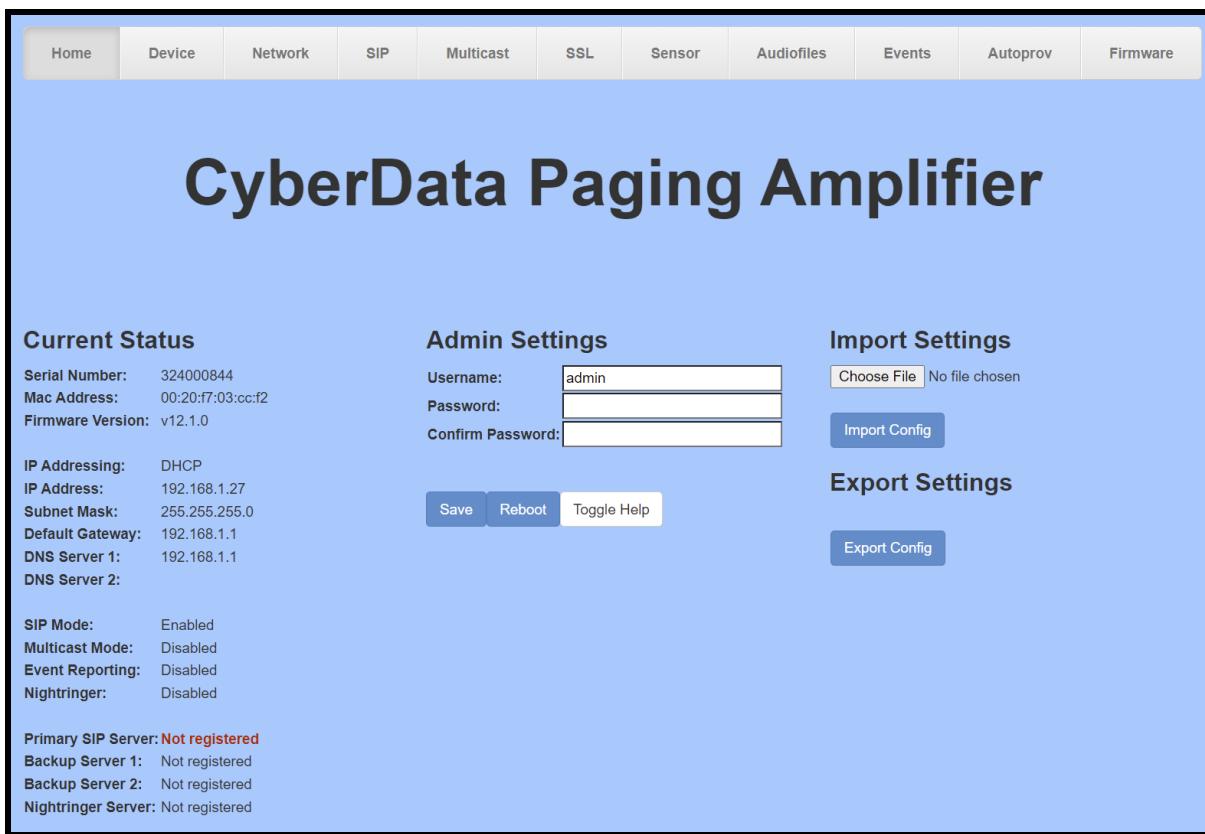
Figure 6-1: CyberData Discovery Utility



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

SIP Settings

- Enable SIP operation:
- SIP Transport Protocol:
- TLS Version: 1.2 only (recommended)
- Verify Server Certificate:
- Register with a SIP Server:
- Use Cisco SRST:
- Primary SIP Server: wildixstudent9.wildixin.com
- Primary SIP User ID: 300
- Primary SIP Auth ID: 300
- Primary SIP Auth Password:
- Backup SIP Server 1:
- Backup SIP User ID 1:
- Backup SIP Auth ID 1:
- Backup SIP Auth Password 1:
- Backup SIP Server 2:
- Backup SIP User ID 2:
- Backup SIP Auth ID 2:
- Backup SIP Auth Password 2:
- Remote SIP Port: 5060
- Local SIP Port: 5060
- Outbound Proxy:
- Outbound Proxy Port: 0
- Disable rport Discovery:
- Buffer SIP Calls:
- Re-registration Interval (in seconds): 360
- Unregister on Boot:
- Keep Alive Period: 10000

Nightringer Settings

- Enable Nightringer:
- SIP Server: wildixstudent9.wildixin.com
- Remote SIP Port: 5060
- Local SIP Port: 5061
- Outbound Proxy:
- Outbound Proxy Port: 0
- User ID: 301
- Authenticate ID: 301
- Authenticate Password:
- Re-registration Interval (in seconds): 360

RTP Settings

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

Call Disconnection

- Terminate Call after delay: 0

Codec Selection

- Force Selected Codec:
- Codec:

Buttons

- Save
- Reboot
- Toggle Help

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 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.