



## *Wildix Configuration Guide: Paging Amplifiers*



Document Part # 931889C

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## **Wildix Configuration Guide: Paging Amplifiers Document #931889C**

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## Revision Information

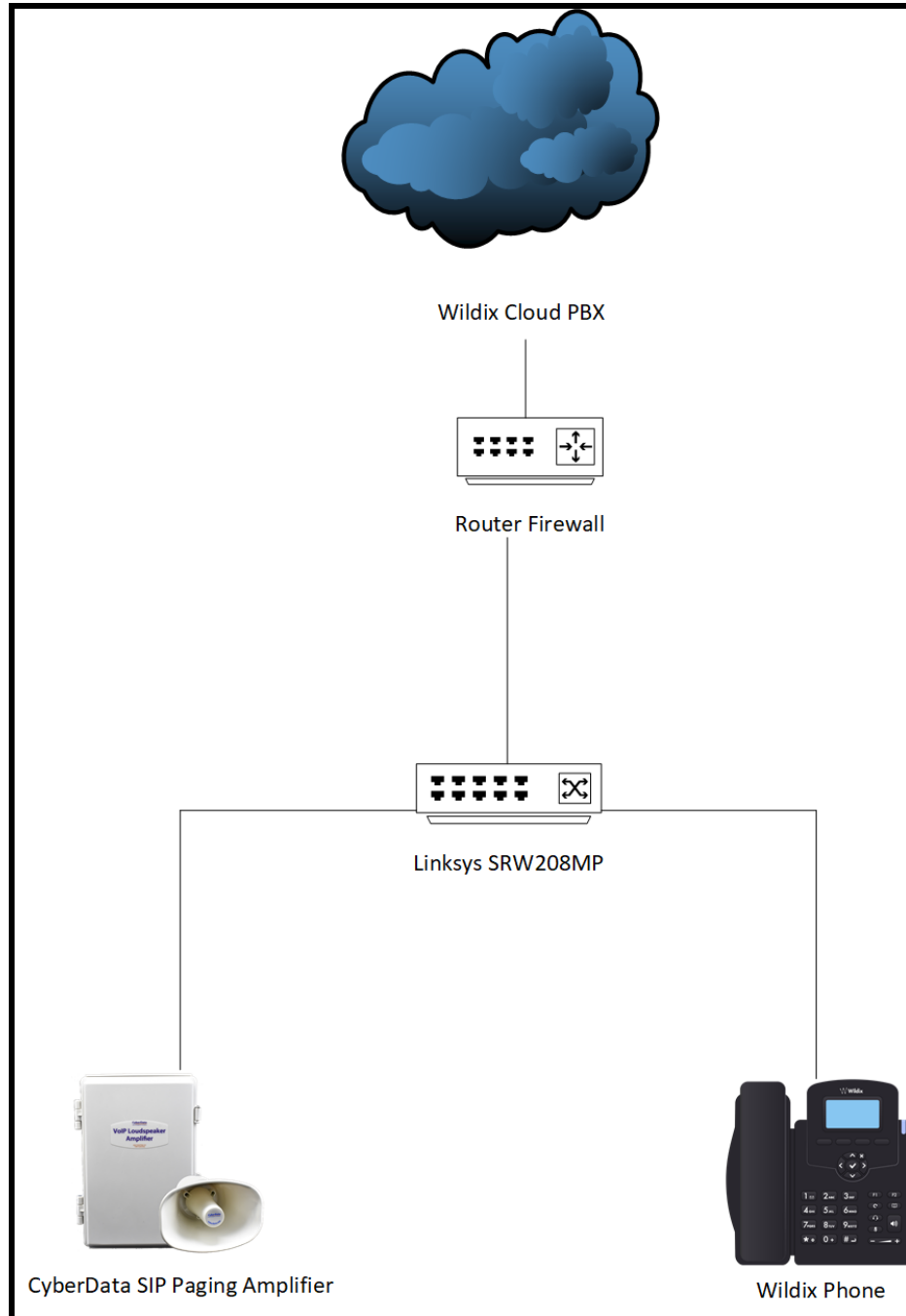
- 10/7/2021 – Initial Release.
- 10/14/2021 – Update to extension creation process.
- 11/10/2021 – Updated screenshots and extension requirements.

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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 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
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](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](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](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](https://files.cyberdata.net/assets/011457/011457_931508D_SIP_IP66_Outdoor_Horn_Speaker_Operations_Guide.pdf)



## 4.0 Configuration Procedure: Extension Creation

*Note: Wildix requires a Wildix UC-Basic (simple intercom usage or Vision & Super Vision user) or Wildix UC-Essential ( users who want to manage the intercom from Collaboration) to use CyberData products on the platform.*

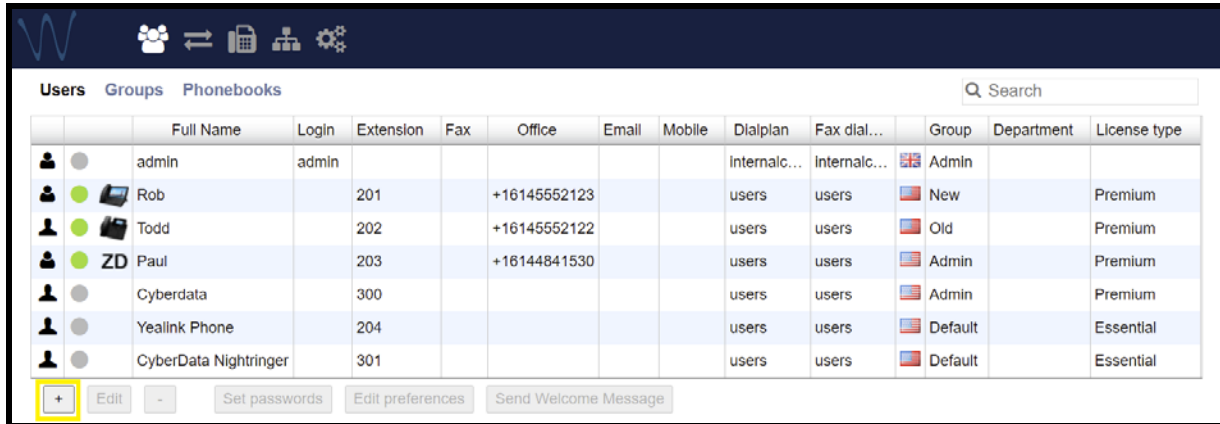
1. Log into Wildix at the provided URL.

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

The screenshot shows the Wildix Collaboration login interface. At the top, there is a large white 'W' logo on a blue background. Below the logo, the text 'Welcome to Wildix Collaboration' is centered. The main login area is a white box containing a 'Login' input field, a 'Password' input field with a toggle icon, a 'Remember me' checkbox, and a dark blue 'Login' button. At the bottom right, there is a 'Login with' section featuring icons for Google and Windows.

- On the **Users Menu** page press the + button to add a new extension. .

**Figure 4-2: Users Menu**



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

**Figure 4-3: Extension creation**

The screenshot shows a 'Add' pop-up window with a close button (X) in the top right corner. The form contains the following fields and options:

- User**: A dropdown menu currently showing 'User'.
- Full Name**: A text input field.
- Login**: A text input field.
- Extension**: A text input field.
- Fax**: A text input field.
- Office**: A text input field.
- Email**: A text input field.
- Mobile**: A text input field.
- Dialplan**: A dropdown menu showing 'users (Internal dialplan)'.
- Fax dialplan**: A dropdown menu showing 'users (Internal dialplan)'.
- Language**: A dropdown menu showing 'En-us'.
- Group**: A dropdown menu showing 'Default'.
- Department**: A text input field.
- License type**: A dropdown menu showing 'Essential'.

At the bottom right of the form, there are 'Ok' and 'Cancel' buttons.

4. Make sure the drop-down menu has **User** selected.
5. Set the full name to the location of the paging amplifier.
6. 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 4-4:** Filled Extension Popup

	User
Full Name	Cyberdata Paging Amplifier
Login	
Extension	300
Fax	
Office	
Email	
Mobile	
Dialplan	users (Internal dialplan)
Fax dialplan	users (Internal dialplan)
Language	En-us
Group	Admin
Department	
License type	Premium

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

**Figure 4-5: Common Area Phone Pop-up – Filled**

	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 Paging Amplifier			300					users	users	Admin		Premium
Yealink Phone			204					users	users	Default		Essential
CyberData Nightringer			301					users	users	Default		Essential

9. After selecting the extension, press **Set Passwords**.
10. Click on the **Generate** button for **SIP/VoIP** to create a password.

**Figure 4-6: Set Passwords Popup**

**Set passwords** ✕

WEB

SIP/VoIP

11. 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

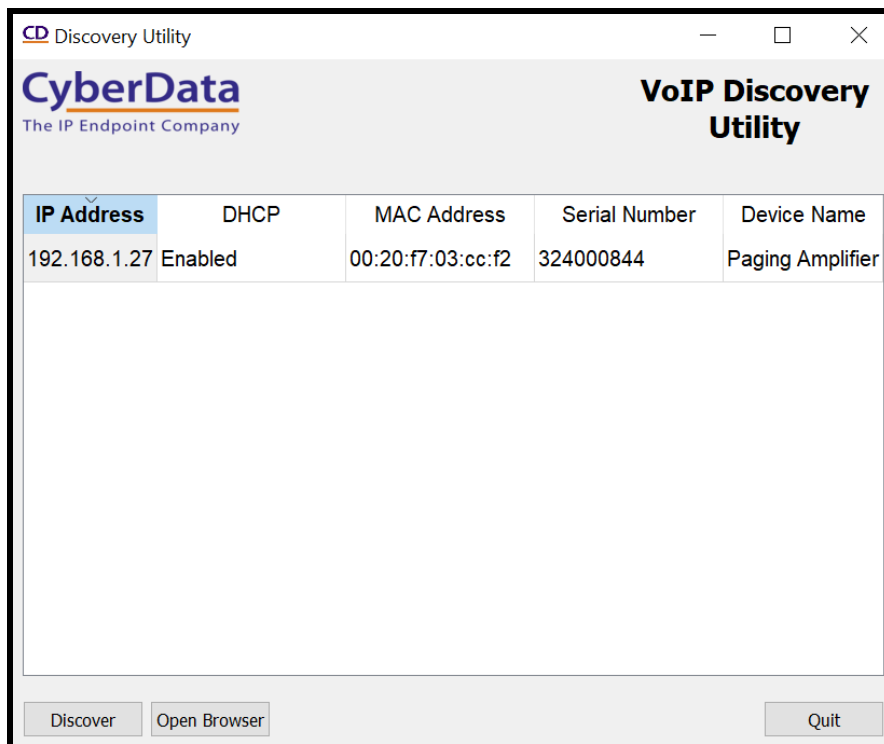
If you are configuring through the web interface, use the following steps to login to the web interface of your CyberData device.

**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**

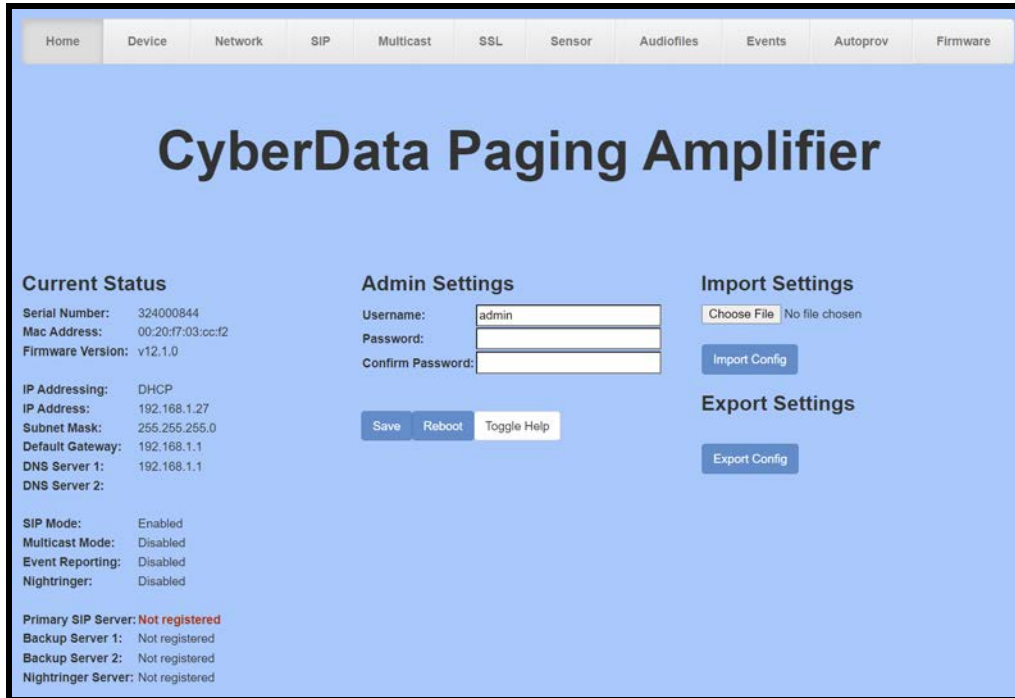


2. Enter the default credentials when prompted and click the **Log In** button.

Username: admin

Password: admin

Figure 5-2: Home Tab



3. Navigate to the SIP tab.

Figure 5-3: SIP Tab

The screenshot displays the configuration interface for the CyberData Paging Amplifier, specifically the SIP Tab. The interface is divided into several sections:

- SIP Settings:** Includes checkboxes for 'Enable SIP operation' (checked), 'Verify Server Certificate' (unchecked), and 'Register with a SIP Server' (checked). It also features a dropdown for 'SIP Transport Protocol' (UDP), 'TLS Version' (1.2 only), and various input fields for 'Primary SIP Server' (wildixstudent9.wildix.com), 'Primary SIP User ID' (300), 'Primary SIP Auth ID' (300), and 'Primary SIP Auth Password' (masked). Backup settings for SIP Server 1 and 2 are also present.
- Nightringer Settings:** Includes a checkbox for 'Enable Nightringer' (unchecked) and input fields for 'SIP Server' (10.0.0.253), 'Remote SIP Port' (5060), 'Local SIP Port' (5061), 'Outbound Proxy' (empty), 'Outbound Proxy Port' (0), 'User ID' (241), 'Authenticate ID' (241), 'Authenticate Password' (masked), and 'Re-registration interval (in seconds)' (360).
- RTP Settings:** Includes input fields for 'RTP Port (even)' (10500), 'Jitter Buffer' (50), and a dropdown for 'SRTP' (Disabled).
- Call Disconnection:** Includes an input field for 'Terminate Call after delay' (0).
- Codec Selection:** Includes a checkbox for 'Force Selected Codec' (unchecked) and a dropdown for 'Codec' (PCMU (G.711, u-law)).

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

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 of the CyberData Paging Amplifier web interface. The page has a light blue background and a navigation menu at the top with tabs for Home, Device, Network, SIP, Multicast, SSL, Sensor, Audiofiles, Events, Autoprov, and Firmware. The main heading is 'CyberData Paging Amplifier'. Below this, there are three main sections: 'Current Status', 'Admin Settings', and 'Import Settings'. The 'Current Status' section lists various system parameters. The 'Admin Settings' section includes fields for Username (admin), Password, and Confirm Password, along with Save, Reboot, and Toggle Help buttons. The 'Import Settings' section has a 'Choose File' button and an 'Import Config' button. Below these is an 'Export Settings' section with an 'Export Config' button. At the bottom, there is a list of server registration statuses.

Section	Parameter	Value
Current Status	Serial Number:	324000844
	Mac Address:	00:20:f7:03:cc:f2
	Firmware Version:	v12.1.0
	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:	
	SIP Mode	SIP Mode:
Multicast Mode:		Disabled
Event Reporting:		Disabled
Nightringer:		Disabled
Server Registration	Primary SIP Server:	Registered
	Backup Server 1:	Not registered
	Backup Server 2:	Not registered
	Nightringer Server:	Not registered



## 6.0 Configuration Procedure: Setting up the Nightringer Extension

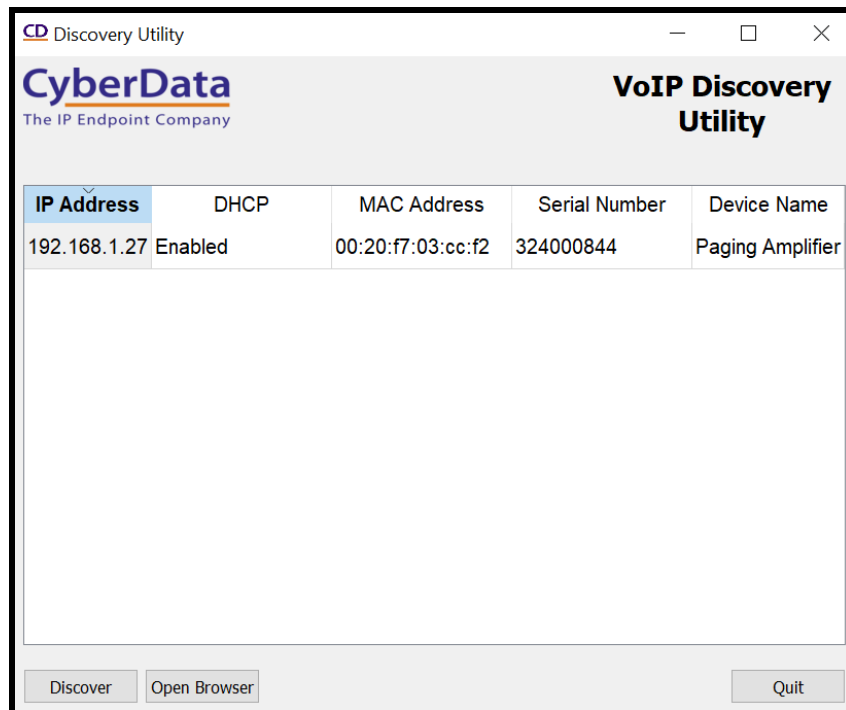
If you are configuring through the web interface, use the following steps to login to the web interface of your CyberData device.

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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

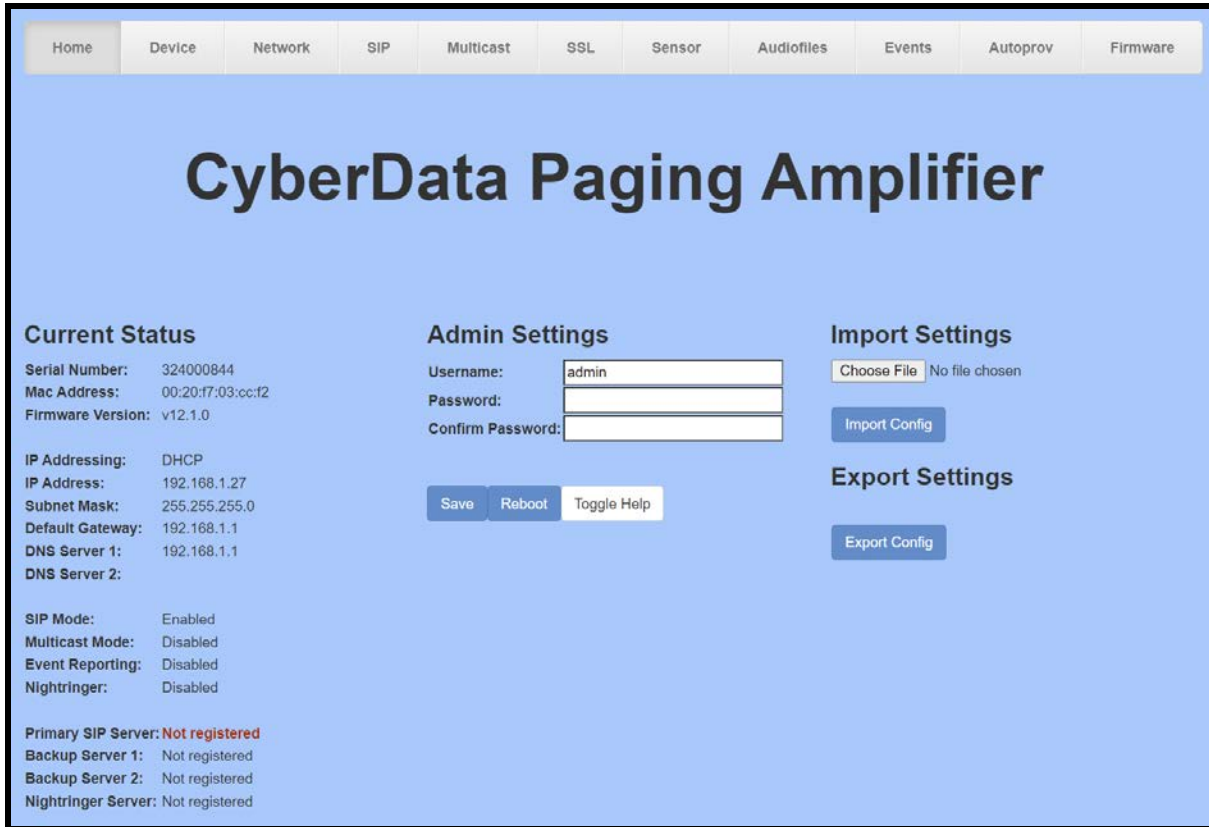


2. Enter the default credentials when prompted and click the **Log In** button.

Username: admin

Password: admin

Figure 6-2: Home Tab



3. Navigate to the SIP Tab.

Figure 6-4: SIP Tab

The screenshot shows the configuration page for the CyberData Paging Amplifier, titled "CyberData Paging Amplifier". It is divided into several sections:

- SIP Settings:** Includes checkboxes for "Enable SIP operation" (checked), "Verify Server Certificate" (unchecked), and "Register with a SIP Server" (checked). It also has a "Use Cisco SRST" checkbox (unchecked). Text fields include "Primary SIP Server" (wildixstudent9.wildixin.com), "Primary SIP User ID" (300), "Primary SIP Auth ID" (300), and "Primary SIP Auth Password" (masked). There are also fields for Backup SIP Servers 1 and 2, their respective User IDs and Auth IDs, and Auth Passwords. Other fields include "Remote SIP Port" (5060), "Local SIP Port" (5060), "Outbound Proxy", "Outbound Proxy Port" (0), "Disable rport Discovery" (unchecked), "Buffer SIP Calls" (unchecked), "Re-registration Interval (in seconds)" (360), "Unregister on Boot" (unchecked), and "Keep Alive Period" (10000).
- Nightringer Settings:** Includes a checked "Enable Nightringer" checkbox. Text fields include "SIP Server" (wildixstudent9.wildixin.com), "Remote SIP Port" (5060), "Local SIP Port" (5060), "Outbound Proxy", "Outbound Proxy Port" (0), "User ID" (301), "Authenticate ID" (301), "Authenticate Password" (masked), and "Re-registration Interval (in seconds)" (360).
- RTP Settings:** Includes "RTP Port (even)" (10500), "Jitter Buffer" (50), and "SRTP" (Disabled).
- Call Disconnection:** Includes "Terminate Call after delay" (0).
- Codec Selection:** Includes "Force Selected Codec" (unchecked) and "Codec" (PCMU (G.711, u-law)).

At the bottom of the page are three buttons: "Save", "Reboot", and "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.