

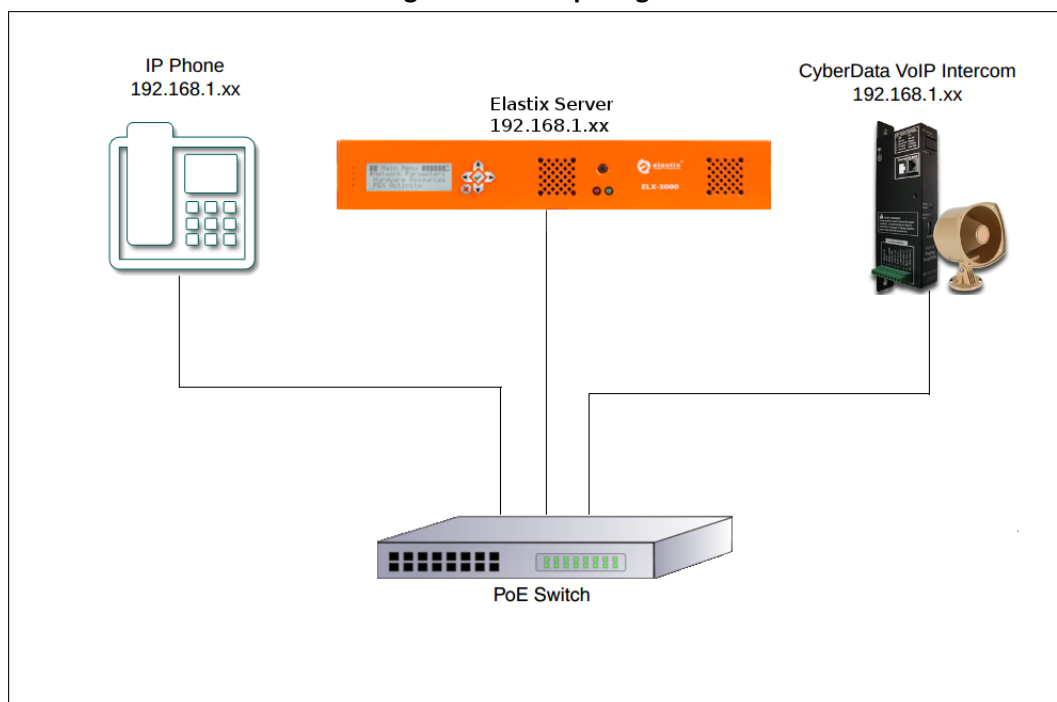


## *VoIP Paging Amplifier with Elastix Server Setup Guide*

## 1.0 Setup Diagram

Figure 1-1 is a setup diagram for a single VoIP Paging Amplifier configuration. In this configuration, the VoIP Paging Amplifier acts as a standalone SIP telephony device.

**Figure 1-1. Setup Diagram**



## 2.0 Host PC Environment

**Table 2-1. Host Server Environment Details**

	Description
Hardware Type	Elastix Appliance ELX-Series
Hardware Version	ELX-3000
Software Type	Elastix
Software Version	2.2

## 3.0 Test Setup Equipment

**Table 3-1. Test Setup Equipment**

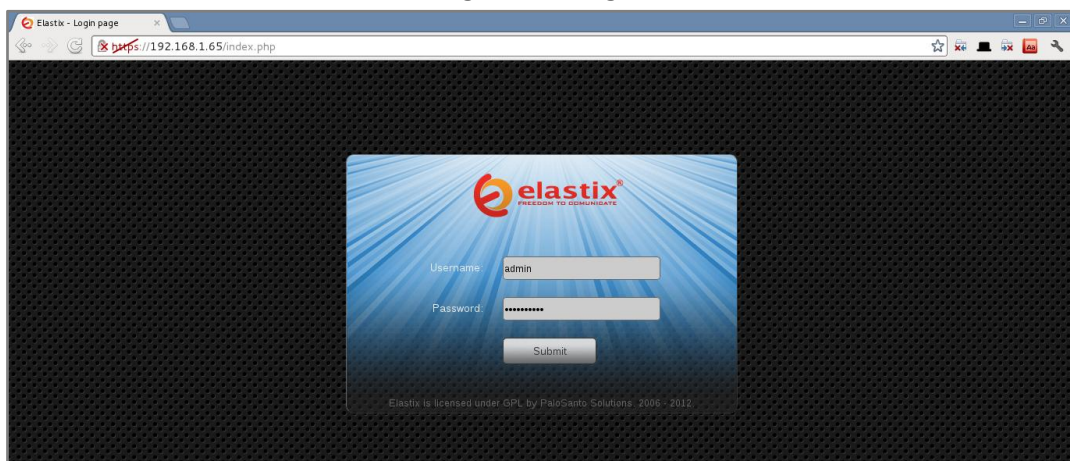
Equipment	Model	Version
IP (SIP) Phone	N/A	N/A
CyberData VoIP Paging Amplifier	011061B	6.0.2
PoE Switch	N/A	N/A

## 4.0 Setup Procedure

**To set up the Elastix Server for the CyberData VoIP Paging Amplifier,**

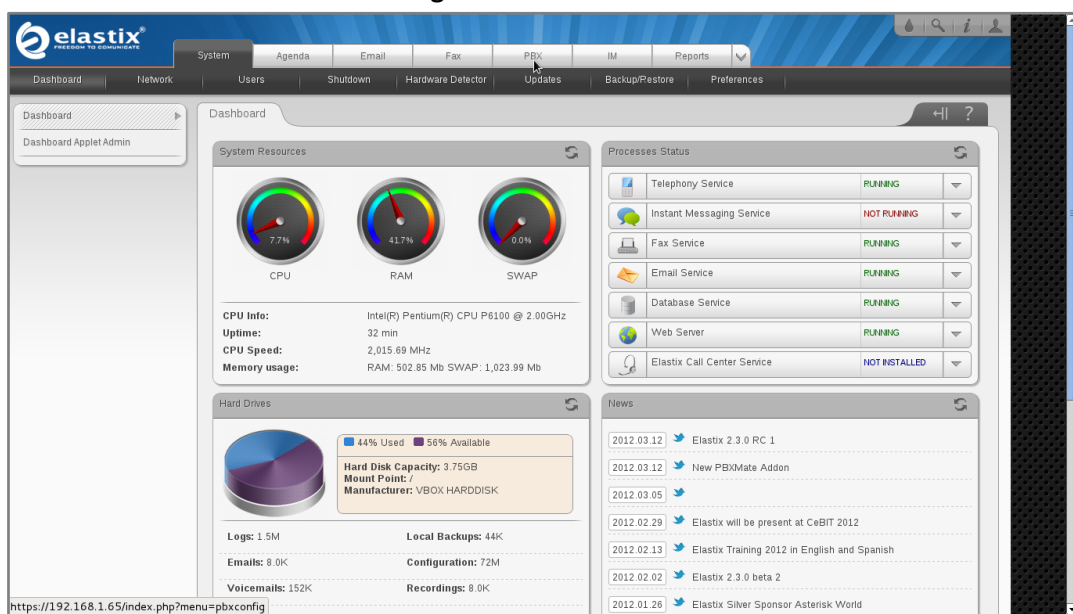
1. Go to the web address of the Elastix Server Login page. The web address is determined by the customer, for this guide we have used the IP address 192.168.1.65
2. On the Login page, type the username and password for an administrative user into the Username: and Password: fields, see Figure 4-1. The user name and password are determined by the customer.

**Figure 4-1. Login**



3. Press Enter or click on the Submit button to go to Elastix's Dashboard
4. Once inside, click on the PBX tab on the menu at the top of the screen

**Figure 4-2. Dashboard**



5. Click on the Submit button to add an extension, see Figure 4-3. This will take you to the Add SIP Extension page, see Figure 4-4.

**Figure 4-3. Add an Extension**

6. On the Add SIP Extension page (Figure 4-4), fill in the following information:

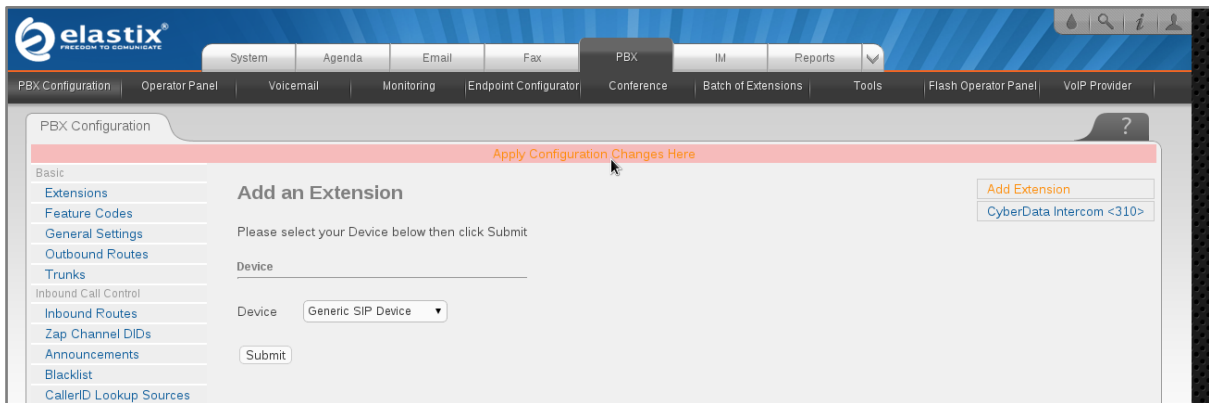
- **User Extension** (310 in this example)
- **Display Name** ('CyberData Paging Amplifier' in this example)
- **secret** ('43f0j93f099y8' in this example)

**Figure 4-4. Add SIP Extension**

7. Click on the 'Submit' button at the end of the page. The extension will be created and you will see the page on Figure 4-5 displaying the "Apply Configuration Changes Here" pink ribbon on top of the screen.

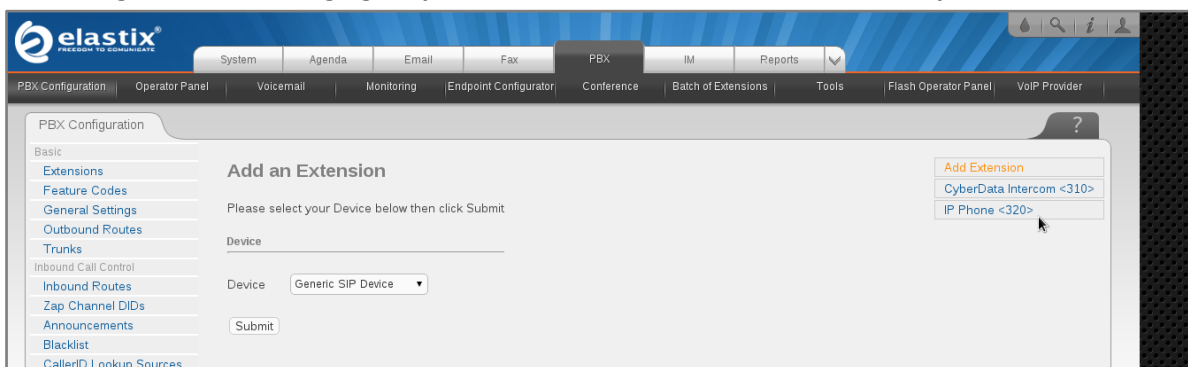
8. Click in the “Apply Configuration Changes Here” link

**Figure 4-5. Apply Configuration Changes Here**



9. With this you have just finished creating a SIP extension that will be used by the VoIP Paging Amplifier to register with the Elastix Server. Repeat Steps 5 through 8 to similarly create another extension (different values on Step 6) to be used by the IP (SIP) Phone to register as well (extension 320 in this example). Once finished you will see something similar to Figure 4-6

**Figure 4-6. VoIP Paging Amplifier and IP Phone extensions successfully created**



10. To register the Paging Amplifier, you will need to enter the information from the extension created on the Elastix Server into the Paging Amplifier by logging into the CyberData VoIP Paging Amplifier WebUI.

Log into the CyberData VoIP Paging Amplifier WebUI (Figure 4-7) by pointing your browser to the Paging Amplifier’s IP address.

For the initial configuration of the Paging Amplifier, refer to the VoIP Paging Amplifier Operation Guide PDF which can be found at the VoIP Paging Amplifier product page at: <http://www.cyberdata.net/products/voip/digitalanalog/ceilingspkr2/docs.html>

**Table 4-1. Factory Default Settings**

Parameter	Factory Default Setting
IP Addressing	DHCP
IP Address <sup>a</sup>	10.10.10.10
Web Access Username	admin
Web Access Password	admin
Subnet Mask <sup>a</sup>	255.0.0.0
Default Gateway <sup>a</sup>	10.0.0.1

a. Default if there is not a DHCP server present.

**Note** You may also download CyberData's VoIP Discovery Utility program which allows you to easily find and configure the default web address of the CyberData VoIP products.

CyberData's VoIP Discovery Utility program is available at the following web address:

[http://www.cyberdata.net/support/voip/discovery\\_utility.html](http://www.cyberdata.net/support/voip/discovery_utility.html)

11. When prompted, enter the following Web Access Username and Web Access Password to access the CyberData VoIP Paging Amplifier WebUI (Figure 4-7)

**Figure 4-7. CyberData VoIP Paging Amplifier WebUI**

The screenshot displays the CyberData VoIP Paging Amplifier WebUI. The interface has a blue header with the title "CyberData Paging Amplifier". On the left, there is a vertical menu with buttons for: Home, Device Config, Networking, SIP Config, Nightringer, Sensor Config, Multicast Config, Audio Config, Event Config, Autoprovisioning, and Update Firmware. The main content area is divided into two sections: "Device Settings" and "Current Settings".

**Device Settings:**

- Device Name: CyberData Paging Amp
- Change Username: admin
- Change Password: (empty field)
- Re-enter Password: (empty field)

**Current Settings:**

- Serial Number: 061002256
- Mac Address: 00:20:f7:01:3a:8c
- Firmware Version: v6.0.2
- IP Addressing: static
- IP Address: 192.168.1.79
- Subnet Mask: 255.255.255.0
- Default Gateway: 192.168.1.100
- DNS Server 1: 192.168.1.100
- DNS Server 2: 8.8.8.8
- Speaker Volume: analog
- High Power mode is: not active
- SIP Mode is: enabled (Registered with SIP Server)
- Nightringer is: disabled
- Multicast Mode is: disabled
- Event Reporting is: disabled

\* You need to reboot for changes to take effect

12. Use the information from the Add SIP Extension page (Figure 4-4) to enter the following information on the SIP Config page of the VoIP Paging Amplifier:

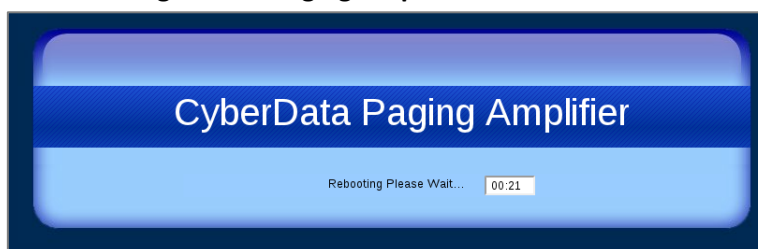
- **SIP Server** (192.168.1.65 in this example)
- **SIP User ID** (310 in this example)
- **Authenticate ID** (310 in this example)
- **Authenticate Password** (43f0j93f099y8 in this example)
- **Dial out Extension** (320 in this example)

**Note** Figure 4-8 is an example of a CyberData VoIP Paging Amplifier that is configured to extension 310

**Figure 4-8. SIP Config Page**

13. Click on the Save button at the bottom of the screen and then on the Reboot button next to it. The screen on Figure 4-9 will be shown

**Figure 4-9. Paging Amplifier Reboot Timer**



14. After the Paging Amplifier finishes rebooting, the green Status LED on the Paging Amplifier will remain lit to indicate normal operation.

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15. To test the Paging Amplifier's call reception feature, pick up the previously configured IP (SIP) Phone and call the Paging Amplifier's extension number (310 in this example). When the call is established, speak into the phone and verify that you can hear your voice through the Paging Amplifier.

This step completes the procedure.