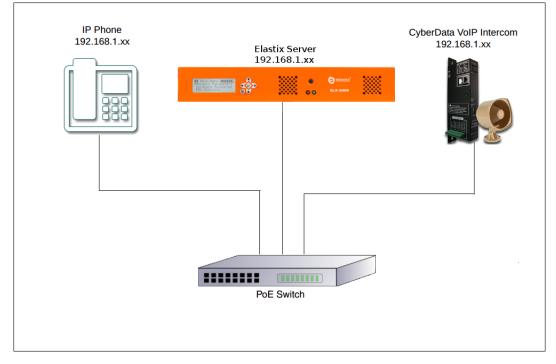




VoIP Paging Amplifier with Elastix Server Setup Guide

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.





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

Ta	ble 3-1. Test Setu	p 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.





- 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

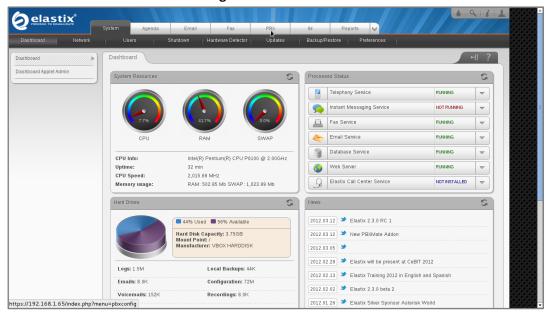


Figure 4-2. Dashboard

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

										i	1
	System	Agenda	Email	Fax	PBX	IM	Reports				
PBX Configuration Operator Pane	Voice	email	Monitoring E	ndpoint Configurator	Conference	Batch of Ext	ensions	Tools	Flash Operator Panel	VolP Provider	
PBX Configuration										?	
Basic											
Extensions	Add a	n Extensi	on							Add Extension	
Feature Codes											
General Settings	Please se	lect your Devic	e below then clic	k Submit							
Outbound Routes											
Trunks	Device										
Inbound Call Control											
Inbound Routes	Device	Generic SIP D	Device 🔻								
Zap Channel DIDs											
Announcements	Submit										
Blacklist	*										
CallerID Lookup Sources											
Day/Night Control											

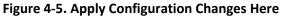
- 6. On the Add SIP Extension page (Figure 4-4), fill in the following information:
- User Extension (310 in this example)
- Display Name ('CyberData Paging Amplifier' in this example)
- secret ('43f0j93f099y8' in this example)

Figure 4-4	Add SIP	Extension
------------	---------	-----------

elastix									191i	2
	System Agen	da. Email	Fax	РВХ	IM	Reports				
Configuration Operator Pane	Voicemail	Monitoring	Endpoint Configurator	Conference	Batch of E	xtensions	Tools	Flash Operator Panel	VoIP Provider	
PBX Configuration									?	
Basic										
Extensions	Add SIP Ext	ension							Add Extension	
Feature Codes										
General Settings										
Outbound Routes	Add Extension									
Trunks	Add Extension									
nbound Call Control										
	User Extension	310								
Zap Channel DIDs	Display Name	CyberData Interco	om							
Announcements Blacklist	CID Num Alias									
CallerID Lookup Sources	CID NUM Allas									
Day/Night Control	SIP Alias									
Follow Me										
IVR	Extension Options									
Queue Priorities	,									
Queues	Outbound CID									
Ring Groups	Ring Time									
Time Conditions		Default 🔻								
Time Groups	Call Waiting	Disable 🔻								
Internal Options & Configuration	Call Screening	Disable	•							
Conferences	Pinless Dialing	Disable V								
Languages		Disable +								
Misc Applications	Emergency CID									
Misc Destinations										
Music on Hold	Assigned DID/CID									
PIN Sets										
Paging and Intercom	DID Description									
Parking Lot										
System Recordings	Add Inbound DID									
VoiceMail Blasting	Add Inbound CID									
Remote Access										
Callback	Device Options									
DISA	,									
Option	This device uses s	ip technology.								
Unembedded freePBX										
	secret	43f0j93f099y8								
	dtmfmode	rfc2833								

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



	System Agenda Email	Fax	РВХ	IM Reports	~		• 9 i	
PBX Configuration Operator Pane	Voicemail Monitoring	Endpoint Configurator	Conference	Batch of Extensions	Tools	Flash Operator Panel	VoIP Provider	
PBX Configuration							?	
		Apply Configurat		re				
Basic			R.					
Extensions	Add an Extension					Add Extensi	ion	
Feature Codes						CyberData	Intercom <310>	
General Settings	Please select your Device below then	click Submit						
Outbound Routes								
Trunks	Device							
Inbound Call Control								
Inbound Routes	Device Generic SIP Device •							
Zap Channel DIDs								
Announcements	Submit							
Blacklist								
CallerID Lookup Sources								

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

	System Agenda Email Fax PBX IM Reports 🗸	6 9 <i>i</i> 1			
Configuration Operator Pane	Voicemail Monitoring Endpoint Configurator Conference Batch of Extensions Tools Flash Op	verator Panel VolP Provider			
PBX Configuration		?			
Basic					
Extensions	Add an Extension	Add Extension			
Feature Codes	CyberData Intercom <310> Please select your Device below then click Submit IP Phone <320>				
General Settings					
Outbound Routes		N			
Trunks	Device				
Inbound Call Control					
Inbound Routes	Device Generic SIP Device				
Zap Channel DIDs					
Announcements	Submit				
Blacklist					
CallerID Lookup Sources					

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

	, ,
Parameter	Factory Default Setting
IP Addressing	DHCP
IP Address ^a	10.10.10
Web Access Username	admin
Web Access Password	admin
Subnet Mask ^a	255.0.0.0
Default Gateway ^a	10.0.0.1

Table 4-1. Factory Default Settings

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

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

	CyberDat	a Paging Amplifier
lome	Device Settings	
evice Config	Device Name:	CyberData Paging Amp
etworking	Change Username:	admin
	Change Password:	
SIP Config	Re-enter Password:	
lightringer	Current Settings	
ensor Config	Serial Number:	061002256
ensor comig	Mac Address:	00:20:f7:01:3a:8c
Iulticast Config	Firmware Version:	v6.0.2
udio Config	IP Addressing:	static
duro comig	IP Address:	192.168.1.79
vent Config	Subnet Mask:	255.255.255.0
	Default Gateway:	192.168.1.100
utoprovisioning	DNS Server 1:	192.168.1.100
pdate Firmware	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

Figure 4-7. CyberData VoIP Paging Amplifier WebUI

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

	CyberData Paging	Amplifier
Home	SIP Configuration	
Device Config	Enable SIP operation: 🥑 (Registered with SIP Server)	
Networking	SIP Settings SIP Server:	192.168.1.65
SIP Config	Remote SIP Port:	5060
	Local SIP Port:	5060
Nightringer	Outbound Proxy:	
Sensor Config	Outbound Proxy Port:	0
Multicast Config	SIP User ID:	310
Multicast Config	Authenticate ID:	310
Audio Config	Authenticate Password:	43f0j93f099y8
Event Config	Register with a SIP Server:	<
Autoprovisioning	Re-registration Interval (in seconds):	360
Update Firmware	Unregister on Reboot:	
	Buffer SIP Calls: Beep before Page:	Y
	RTP Settings	
	RTP Port (even):	10500
	* You need to reboot for changes to take effect	
	Save Reboot	

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

CyberData Paging Amplifier
Rebooting Please Wait 00:21

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

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.