

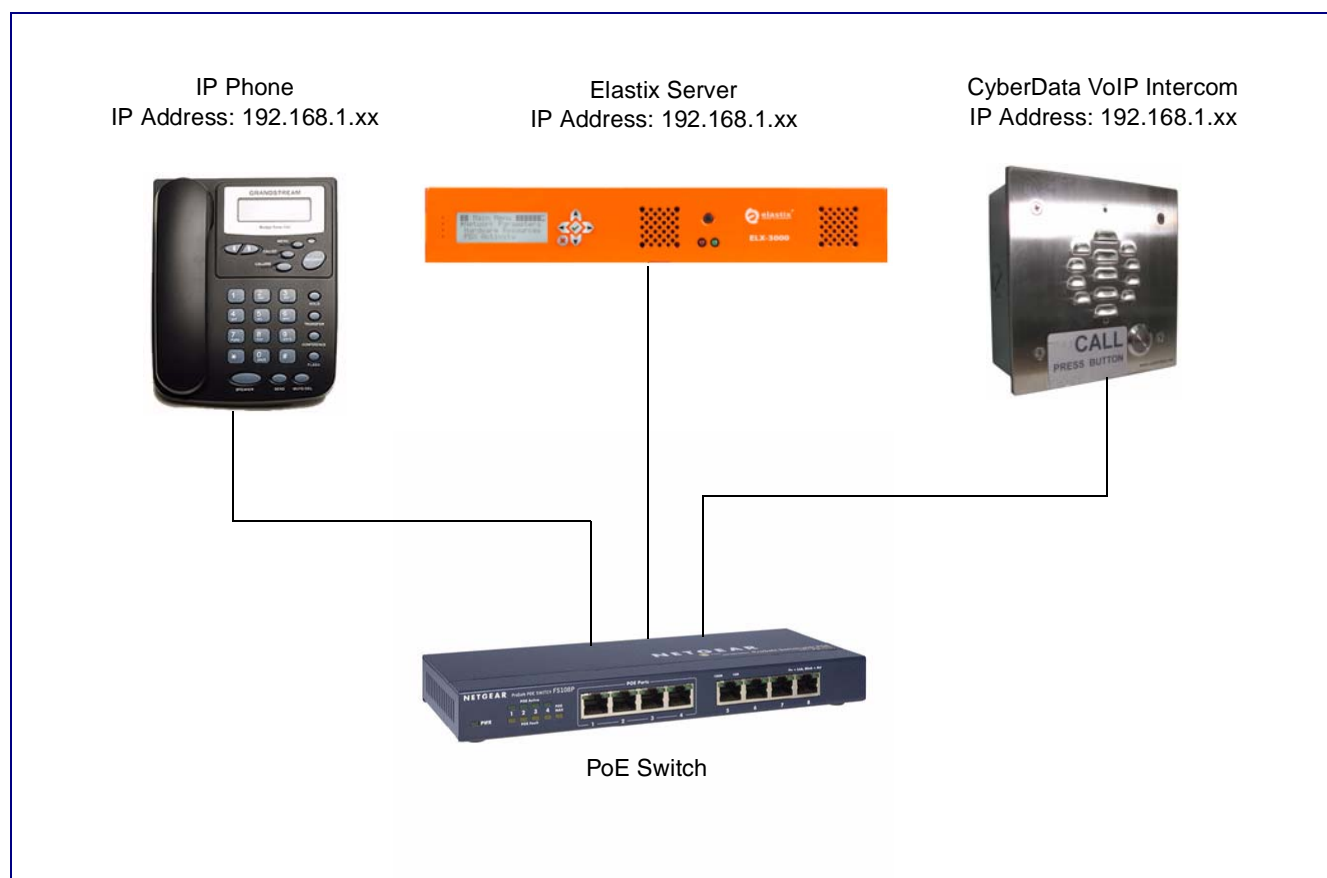


Elastix Server VoIP Intercom Setup Guide

1.0 Setup Diagram

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

Figure 1. Setup Diagram



2.0 Host Environment

Table 1. Host 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 2. Test Setup Equipment

Equipment	Model	Version
IP (SIP) Phone	N/A	N/A
Notes:		
VoIP Intercom	010935F	6.3.0
Notes:		
PoE Switch	N/A	N/A
Notes:		
Notes:		
Notes:		
Notes:		
Notes:		
Notes:		

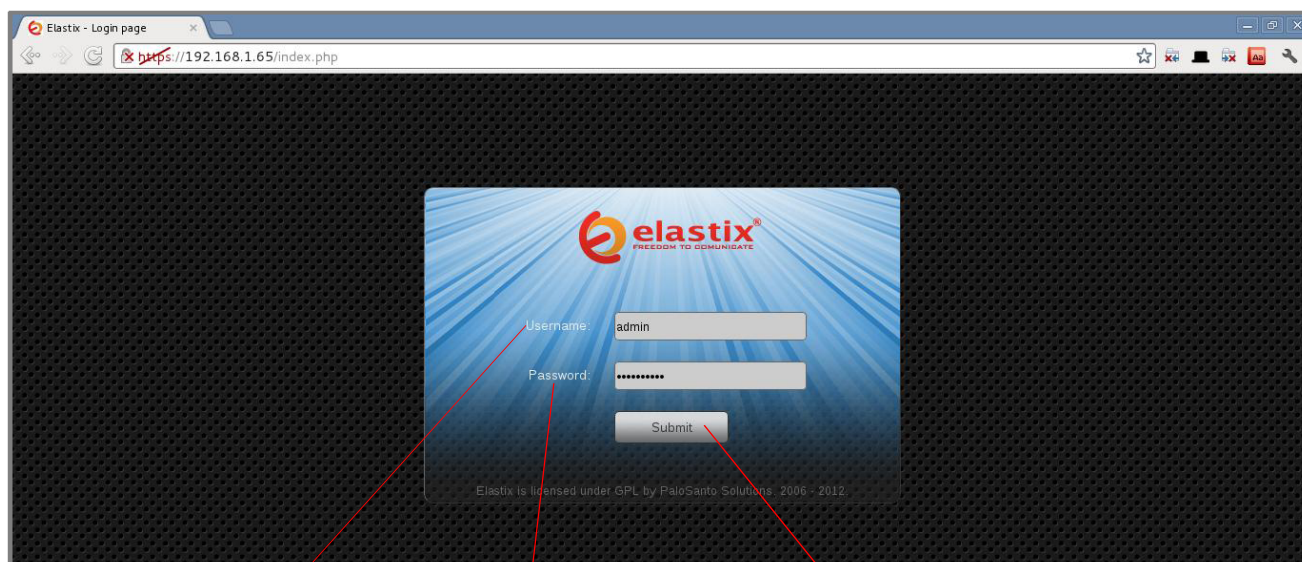
4.0 Setup Procedure

4.1 Elastix Server Configuration

To configure the Elastix server,

1. Go to the web address of the Elastix Server Login page. The web address is determined by the customer, but 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 2](#)). The **Username** and **Password** are determined by the customer.

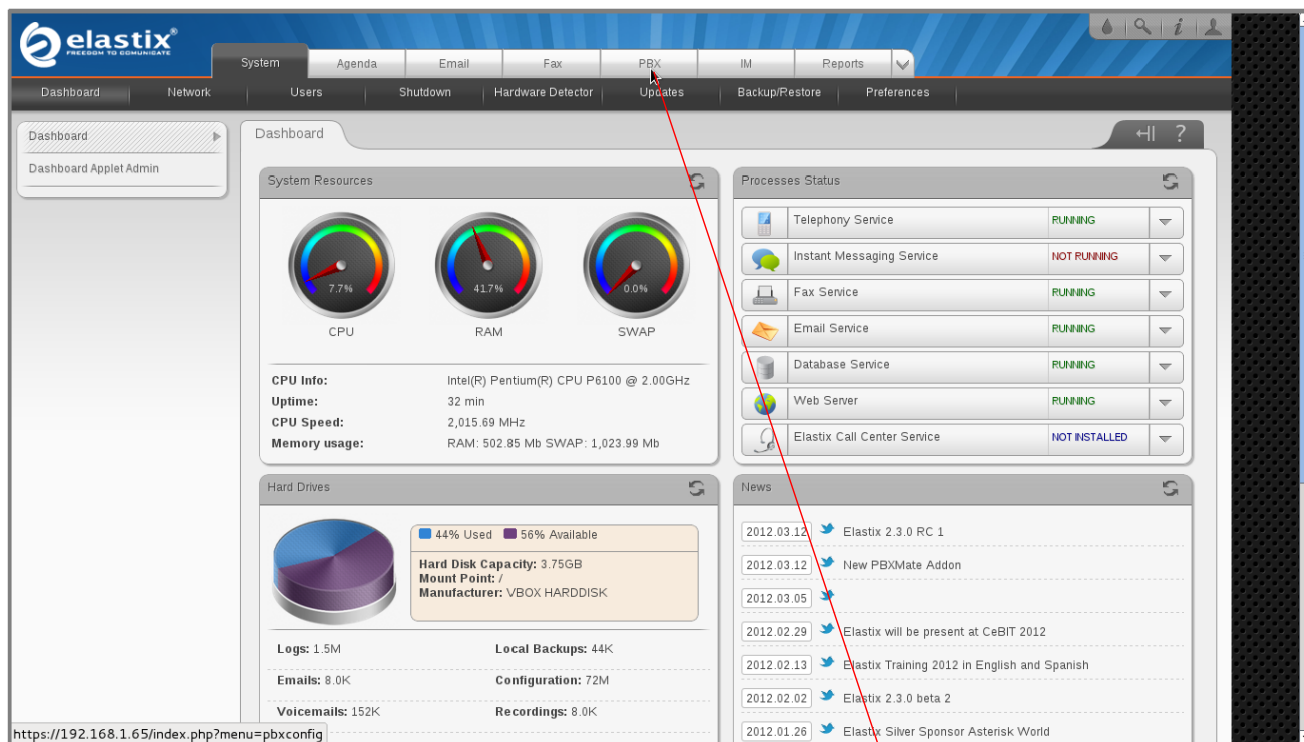
Figure 2. Login



3. Press the Enter key on the keyboard or click on the **Submit** button to go to Elastix.s **Dashboard**.

4. On the **Dashboard** page, click on the **PBX** tab on the menu at the top of the screen.

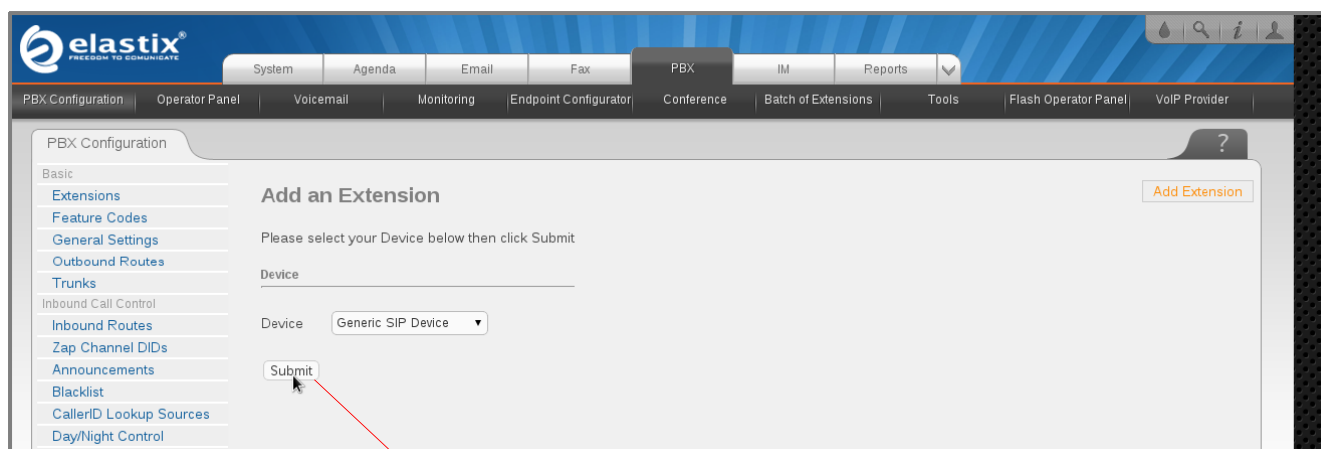
Figure 3. Dashboard



PBX tab

5. Click on the **Submit** button to add an extension (see [Figure 4](#)). This will take you to the **Add SIP Extension** page (see [Figure 5](#)).

Figure 4. Add Extension



The screenshot displays the Elastix web interface for PBX configuration. The top navigation bar includes tabs for System, Agenda, Email, Fax, PBX, IM, and Reports. Below this, a secondary menu lists various configuration areas: PBX Configuration, Operator Panel, Voicemail, Monitoring, Endpoint Configuration, Conference, Batch of Extensions, Tools, Flash Operator Panel, and VoIP Provider. The main content area is titled 'Add an Extension' and contains the instruction: 'Please select your Device below then click Submit'. A 'Device' dropdown menu is set to 'Generic SIP Device'. A 'Submit' button is located below the dropdown. A red arrow points from the text 'Submit button' to this button. On the right side of the form, there is an 'Add Extension' button. A sidebar on the left lists various configuration options under 'PBX Configuration', including Basic, Extensions, Feature Codes, General Settings, Outbound Routes, Trunks, Inbound Call Control, Inbound Routes, Zap Channel DIDs, Announcements, Blacklist, CallerID Lookup Sources, and Day/Night Control.

Submit button

6. On the **Add SIP Extension** page (Figure 5), enter the following information:

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

Figure 5. Add SIP Extension

The screenshot shows the 'Add SIP Extension' page in the Elastix PBX Configuration interface. The form is divided into several sections:

- Add Extension:**
 - User Extension: 310
 - Display Name: CyberData Intercom
 - CID Num Alias: (empty)
 - SIP Alias: (empty)
- Extension Options:**
 - Outbound CID: (empty)
 - Ring Time: Default
 - Call Waiting: Disable
 - Call Screening: Disable
 - Pinless Dialing: Disable
 - Emergency CID: (empty)
- Assigned DID/CID:**
 - DID Description: (empty)
 - Add Inbound DID: (empty)
 - Add Inbound CID: (empty)
- Device Options:**
 - This device uses sip technology.
 - secret: 43f0j93f099y8
 - dtmfmode: rfc2833

Red arrows point from labels below to the 'secret', 'Display Name', and 'User Extension' fields.

secret field

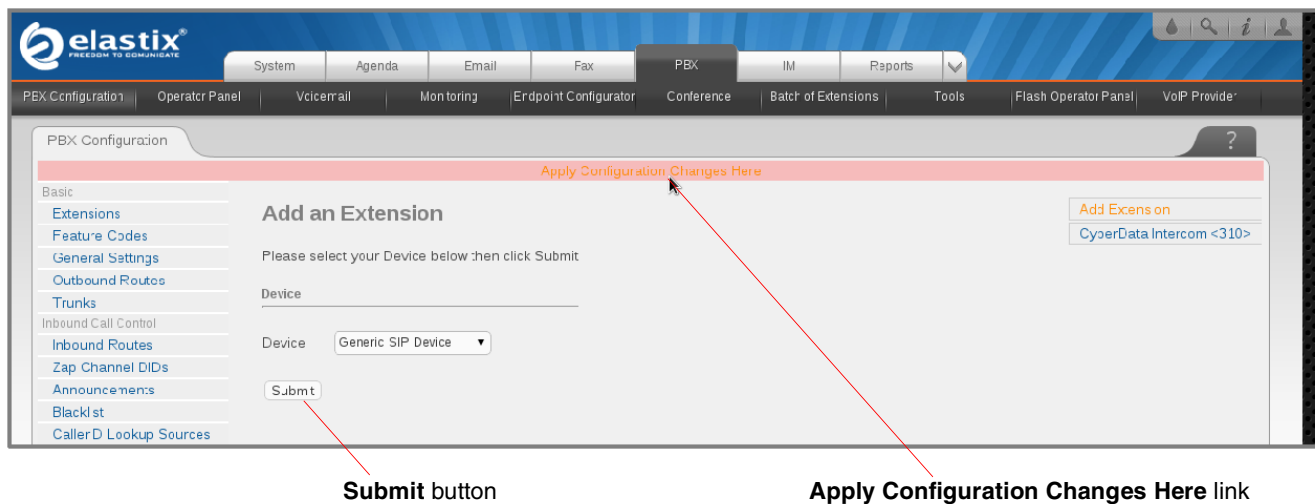
Display Name field

User Extension field

7. Click on the **Submit** button at the end of the page (not shown). The extension will be created and you will see the page on Figure 6 displaying the **Apply Configuration Changes Here** pink ribbon on top of the screen.

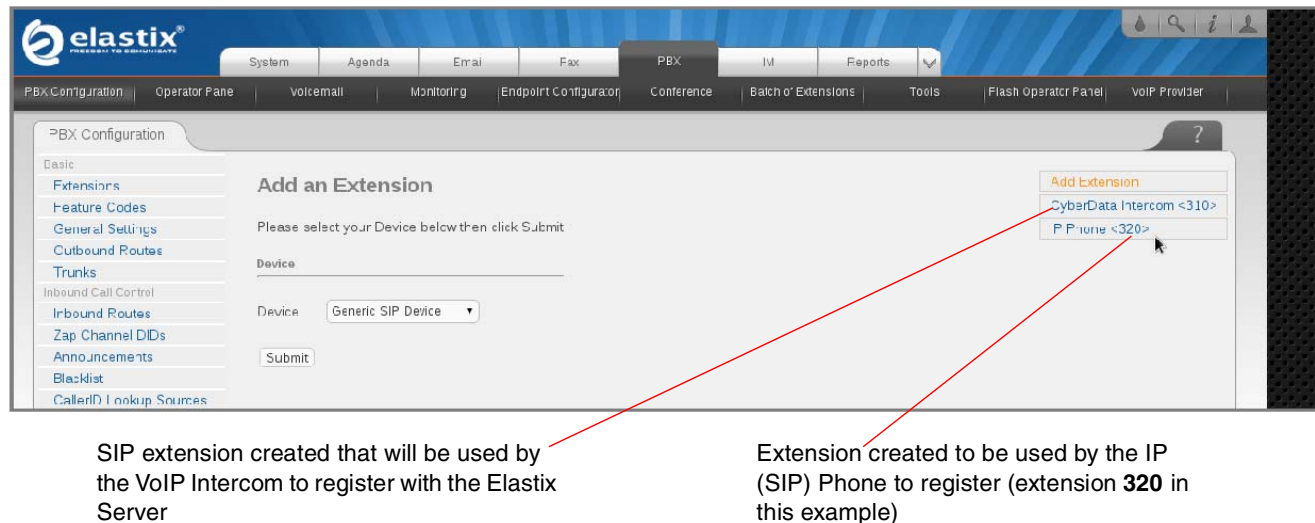
8. Click on the **Apply Configuration Changes Here** link. See [Figure 6](#).

Figure 6. Apply Configuration Changes Here



9. You have just finished creating a SIP extension that will be used by the VoIP Intercom to register with the Elastix Server. Repeat [Step 5](#) through [Step 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 7. VoIP Intercom and IP Phone Extensions Successfully Created



10. To register the Intercom, you will need to enter the information from the extension created on the Elastix Server into the Intercom by logging into the CyberData VoIP Intercom Web UI.
11. Log into the CyberData VoIP Intercom Web UI (Figure 8) by pointing your browser to the Intercom's IP address.

Figure 8. CyberData VoIP Intercom Web UI

The screenshot displays the CyberData Intercom Web UI. On the left is a vertical menu with buttons for Home, Device Config, Networking, SIP Config (highlighted with a mouse cursor), 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 VoIP Intercom
Change Username:	admin
Change Password:	
Re-enter Password:	

Current Settings

Serial Number:	935006715
Mac Address:	00:20:f7:01:4f:62
Firmware Version:	v6.3.0
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:	4
Microphone Gain:	1
SIP Mode is:	enabled
Multicast Mode is:	disabled
Event Reporting is:	disabled
Nightringer is:	disabled (NOT Registered with SIP Server)
Primary SIP Server:	(NOT Registered with SIP Server)
Backup Server 1:	(NOT Registered with SIP Server)

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

Table 2-1. Factory Default Settings

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

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

13. When prompted, use the following default **Web Access Username** and **Web Access Password** to access the CyberData VoIP Intercom Web UI (Figure 9):

Web Access Username: **admin**

Web Access Password: **admin**.

Figure 9. CyberData VoIP Intercom Web UI

The screenshot displays the CyberData Intercom web interface. On the left is a vertical navigation menu with buttons for Home, Device Config, Networking, SIP Config (highlighted with a mouse cursor), 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 VoIP Intercom
Change Username:	admin
Change Password:	
Re-enter Password:	

Current Settings

Serial Number:	935006715
Mac Address:	00:20:f7:01:4f:62
Firmware Version:	v6.3.0
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:	4
Microphone Gain:	1
SIP Mode is:	enabled
Multicast Mode is:	disabled
Event Reporting is:	disabled
Nightringer is:	disabled (NOT Registered with SIP Server)
Primary SIP Server:	(NOT Registered with SIP Server)
Backup Server 1:	(NOT Registered with SIP Server)

14. Use the information from the **Add SIP Extension** page (Figure 5) to enter the following information on the **SIP Configuration** page of the VoIP Intercom (Figure 10):

- **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 10 is an example of a CyberData VoIP Intercom that is configured to extension 310.

Figure 10. SIP Config Page

Save button

Reboot button

15. Click on the **Save** button at the bottom of the screen and then click on the **Reboot** button next to it. See Figure 10.

-
16. The Reboot Timer page will appear . See [Figure 11](#).

Figure 11. Intercom Reboot Timer



17. After the Intercom finishes rebooting, the **GREEN** Call Button LED on the Intercom will remain lit to indicate normal operation.
18. To test the Intercom's call reception feature, pick up the previously configured IP (SIP) Phone and call the Intercom'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 Intercom and vice versa.
19. To test the Intercom's call origination feature, press the Call Button and the previously configured IP (SIP) Phone will start ringing. When the call is established, speak into the Intercom and verify that you can hear your voice through the phone and vice versa.
- This step completes the procedure.