



Connecting SIP-enabled Intercoms & Paging Products to Teliax Hosted PBX Configuration Guide

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Revision Information

Revision 931026B was released on January 5, 2015, and has the following changes:

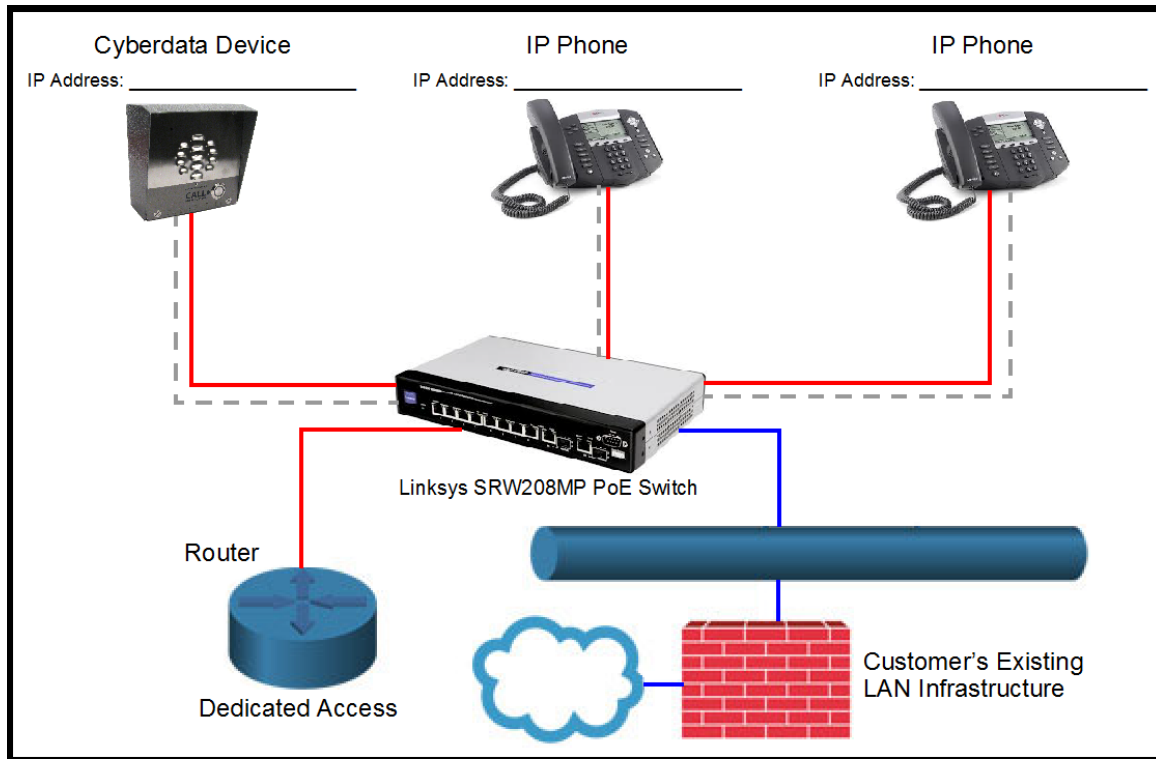
- Formatting changes
- Added [Disclaimers](#)
- Added [Revision Information](#)
- Added [Nightringer Section](#)
- Added [Contact CyberData](#)

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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 Teliax.

Table 2-1. Setup Equipment

EQUIPMENT	MODEL or PART NUMBER	FIRMWARE VERSION
CYBERDATA SIP-ENABLED IP INTERCOM	011186, 011211, 011209, 011214, 011272, 011123, 011113	v10.x.x
CYBERDATA OFFICE RINGER	011216	v10.1.2
CYBERDATA SIP PAGING ADAPTER	011233	v7.1.1b05
CYBERDATA V3 PAGING SERVER	011146	v7.1.1b07
CYBERDATA V2 CEILING SPEAKER	011098, 011099	v6.3.0
CYBERDATA V2 PAGING AMPLIFIER	011061, 011095, 011097	v6.2.0
POLYCOM	VVX300	5.1.1.2986
SNOM	360	snom360-SIP 8.4.31
LINKSYS	SRW208MP	1.0.4

3.0 Setup Procedure

Network Advisories

Teliax uses an FQDN for the SIP server address and domain. The CyberData device(s) need to perform a DNS A query to resolve the IP address of the Teliax FQDN. It is necessary to ensure the configured DNS server(s) have an A record for the Teliax FQDN.

In addition to ensuring the device is configured with an appropriate DNS server to access a DNS A record for the FQDN, the device(s) will also need to use UDP port 5060 and RTP port 10500, or the applicable ports configured on the **SIP Config** page of the web interface. UDP port 5060 and RTP port 10500 are the default values on all noted firmware levels.

Teliax Extension Configuration

Please contact Teliax Support for assistance with extension configuration at 1-888-483-5429 or email help@teliax.com.

Login

Use the following steps to login to the web interface of your CyberData device.

1. First, be sure to download the CyberData Discovery Utility and the proper Operation and Quick Start guides from our website. You may access each CyberData product's web pages from the CyberData VoIP Products index webpage:

<http://www.cyberdata.net/products/voip/index.html>

The CyberData Discovery Utility can be used to locate CyberData devices on your network. You may download it from the following web address:

http://www.cyberdata.net/support/voip/discovery_utility.html

Note: DHCP addressing mode is enabled on default on all noted firmware levels.

2. 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.
3. Enter the default credentials when prompted and click the OK button.

Username: admin

Password: admin

4. On the Home Page, click **SIP Config** on the left hand side of your screen to access the SIP Configuration page.

Figure 3-1. Home Page of a CyberData Web Interface

The screenshot displays the CyberData Outdoor Intercom web interface. The title bar at the top reads "CyberData Outdoor Intercom". On the left side, there is a vertical menu with buttons for: Home, Device Config, Networking, SIP Config (which is 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. The "Device Settings" section contains three input fields: "Device Name" with the value "Outdoor Intercom", "Change Username" with the value "admin", and "Change Password" and "Re-enter Password" fields which are currently empty. The "Current Settings" section displays various system parameters: Serial Number (186102082), Mac Address (00:20:f7:02:88:62), Firmware Version (v10.3.0), IP Addressing (dhcp), IP Address (10.10.1.176), Subnet Mask (255.0.0.0), Default Gateway (10.0.0.1), DNS Server 1 (8.8.4.4), and DNS Server 2. Below these, it shows Speaker Volume (4) and Microphone Gain (4). The status section indicates SIP Mode is enabled, Multicast Mode is disabled, Event Reporting is disabled, Nightringer is disabled (with a red note "(NOT Registered with SIP Server)"), and the Primary SIP Server is "(Registered with SIP Server)".

Configure the SIP Parameters

SIP configuration is virtually identical across all noted CyberData products.

1. Enter the following parameters on the **SIP Config** page of the CyberData web interface:

- SIP Server
- SIP User ID
- SIP Auth ID
- SIP Auth Password
- Re-registration Interval (in seconds)

2. Use the default re-registration interval of **360 seconds**.
3. On supported devices, check the box to *Disable rport Discovery*.
4. On supported devices, enter the *Dial out Extension* and *Extension ID* for outbound calls.

Be sure to save and reboot to store changes. After the device has rebooted and initialized, refresh the Home page of the web interface. Your device should show as **Registered with SIP Server** in green text on the bottom of the page.

Please see the SIP configuration pages on the following pages to view sample configurations.

Make a Test Call

Once your device has registered with Teliax, you may use any phone registered with Teliax to dial the extension of the CyberData device.

For devices supporting bidirectional audio, such as the SIP-enabled intercom products, please be sure to initiate a call from the device to test call completion and audio quality.

Figure 3-2. CyberData SIP-enabled IP Intercom – SIP Configuration

Enable SIP operation: ☒

SIP Settings

Primary SIP Server (Registered): test.ivy.teliax.com

Primary SIP User ID: CyberData01

Primary SIP Auth ID: CyberData01

Primary SIP Auth Password:

Backup SIP Server 1 (NOT Registered):

Backup SIP User ID 1:

Backup SIP Auth ID 1:

Backup SIP Auth Password 1:

Backup SIP Server 2 (NOT Registered):

Backup SIP User ID 2:

Backup SIP Auth ID 2:

Backup SIP Auth Password 2:

Use Cisco SRST: ☐

Remote SIP Port: 5060

Local SIP Port: 5060

Outbound Proxy:

Outbound Proxy Port: 0

Register with a SIP Server: ☒

Re-registration Interval (in seconds): 360

NAT ping (check box if PBX is not local): ☐

Disable rport Discovery: ☒

Figure 3-3. CyberData SIP-enabled IP Intercom - Dial-out Configuration

The screenshot displays a configuration interface for a CyberData SIP-enabled IP Intercom. It is divided into three main sections: 'Call disconnection', 'RTP Settings', and 'Dial Out Settings'. The 'Call disconnection' section includes a field for 'Terminate call after delay (in seconds)' set to 0, with a note stating 'Note: A value of 0 will disable this function'. The 'RTP Settings' section has a field for 'RTP Port (even)' set to 10500. The 'Dial Out Settings' section includes fields for 'Dial out Extension' set to 5000 and 'Extension ID' set to CyberData DUT. At the bottom, there is a message: '* You need to reboot for changes to take effect', followed by 'Save' and 'Reboot' buttons.

Section	Field	Value
Call disconnection	Terminate call after delay (in seconds):	0
	Note: A value of 0 will disable this function	
RTP Settings	RTP Port (even):	10500
Dial Out Settings	Dial out Extension:	5000
	Extension ID:	CyberData DUT

* You need to reboot for changes to take effect

Save Reboot

NOTE:

For the *Dial out Extension*, enter the extension number you wish the intercom to dial when someone presses the call button. This may be a single phone's extension or a ring group extension.

The *Extension ID* is the call ID string used by the intercom and will display in the phone's caller ID screen.

Be sure to save and reboot to store changes.

Figure 3-4. CyberData SIP Paging Adapter

SIP Configuration

Enable SIP operation: ☒ (Registered with SIP Server)

SIP Settings

SIP Server:

test.ivy.teliax.com

Backup SIP Server 1:

Backup SIP Server 2:

Use Cisco SRST:

☐

Remote SIP Port:

5060

Local SIP Port:

5060

Outbound Proxy:

Outbound Proxy Port:

0

SIP User ID:

CyberData01

Authenticate ID:

CyberData01

Authenticate Password:

.....

Register with a SIP Server:

☒

Re-registration Interval (in seconds):

360

Unregister on Reboot:

☐

Disable rport Discovery:

☒

Buffer SIP Calls:

☐

Call disconnection

Terminate call after delay (in seconds):

0

Note: A value of 0 will disable this function

Misc Settings

RTP Port (even):

10500

* You need to reboot for changes to take effect

Figure 3-5. CyberData V3 Paging Server

SIP Configuration

Enable SIP operation: ☒ (Registered with SIP Server)

SIP Settings

SIP Server: test.ivy.teliax.com

Backup SIP Server 1:

Backup SIP Server 2:

Use Cisco SRST: ☐

Remote SIP Port: 5060

Local SIP Port: 5060

Outbound Proxy:

Outbound Proxy Port: 5060

SIP User ID: CyberData01

Authenticate ID: CyberData01

Authenticate Password:

Register with a SIP Server: ☒

Re-registration Interval (in seconds): 360

Unregister on Reboot: ☐

Disable rport Discovery: ☒

Buffer SIP Calls: ☐

Call disconnection

Terminate call after delay (in seconds): 0

Note: A value of 0 will disable this function

Misc Settings

RTP Port (even): 10500

Figure 3-6. CyberData V2 Ceiling Speaker

SIP Configuration

Enable SIP operation: ☒

SIP Settings

SIP Server:	test.ivy.teliax.com
Backup SIP Server 1:	
Backup SIP Server 2:	
Remote SIP Port:	5060
Local SIP Port:	5060
Outbound Proxy:	
Outbound Proxy Port:	0
SIP User ID:	CyberData03
Authenticate ID:	CyberData03
Authenticate Password:	cyb3rd4t403

Register with a SIP Server: ☒

Re-registration Interval (in seconds): 360

Unregister on Reboot: ☐

Buffer SIP Calls: ☐

Beep on page: ☐

Call disconnection

Terminate call after delay (in seconds): 0

Note: A value of 0 will disable this function

RTP Settings

RTP Port (even):	10500
------------------	-------

* You need to reboot for changes to take effect

Figure 3-7. CyberData V2 Paging Amplifier

SIP Configuration

Enable SIP operation: ☒ (Registered with SIP Server)

SIP Settings

Primary SIP Server:	<input type="text" value="test.ivy.teliax.com"/>
Primary SIP User ID:	<input type="text" value="CyberData03"/>
Primary SIP Auth ID:	<input type="text" value="CyberData03"/>
Primary SIP Auth Password:	<input type="text" value="cyb3rd4t403"/>
Backup SIP Server 1:	<input type="text"/>
Backup SIP User ID 1:	<input type="text"/>
Backup SIP Auth ID 1:	<input type="text"/>
Backup SIP Auth Password 1:	<input type="text"/>
Backup SIP Server 2:	<input type="text"/>
Backup SIP User ID 2:	<input type="text"/>
Backup SIP Auth ID 2:	<input type="text"/>
Backup SIP Auth Password 2:	<input type="text"/>
Remote SIP Port:	<input type="text" value="5060"/>
Local SIP Port:	<input type="text" value="5060"/>
Outbound Proxy:	<input type="text"/>
Outbound Proxy Port:	<input type="text" value="0"/>
Register with a SIP Server:	<input checked="" type="checkbox"/>
Re-registration Interval (in seconds):	<input type="text" value="360"/>
Unregister on Reboot:	<input type="checkbox"/>
Buffer SIP Calls:	<input type="checkbox"/>
Beep before Page:	<input checked="" type="checkbox"/>

4.0 Adding a Nightringer to Call Groups

What is a Nightringer?

CyberData paging and intercom products offer a secondary Nightringer extension in addition to the primary extension used for device-specific paging and two-way communication functions.

Implementing a Nightringer will be useful in noisy environments, such as a warehouse or shipping dock, where personnel may not be able to hear a phone ring. For example, add a [CyberData Office Ringer](#) to a ring group in a noisy office area where ringing phones may not be easily heard.

The Nightringer for your device can play a customizable ring tone when an incoming call is detected. The Nightringer extension can be added to ring groups for simultaneous ringing. It will ring until a ring group member picks up the call or when the caller disconnects before a ring group member picks up the call. The Nightringer extension cannot answer a call.

Configuring the Nightringer Extension

Configure a Nightringer extension in the same manner as a SIP extension on the SIP Config page of a CyberData device.

It is important to note the Paging Extension and Nightringer Extension must use separate sets of SIP extension parameters. That is, each must be assigned their own SIP extension. The Nightringer cannot use the same provisioning information already in use by the Paging Extension (and vice versa).

Note: For voice paging, use the Paging Extension on the SIP Configuration page on IP paging products such as the SIP Paging Adapter, V2 Ceiling Speakers, and V2 Paging or Loudspeaker Amplifiers.

Figure 4-1. CyberData Office Ringer – Nightringer Configuration

The screenshot shows the 'CyberData Office Ringer' web interface. On the left is a vertical navigation menu with buttons for: Home, Device Config, Networking, SIP Config, Nightringer (which is highlighted), Sensor Config, Multicast Config, Audio Config, Event Config, Autoprovisioning, and Update Firmware. The main content area is titled 'Nightringer Configuration'. It features a checkbox 'Enable Nightringer:' which is checked, followed by the text '(Registered with SIP Server)' in green. Below this is a section titled 'Nightringer Settings' enclosed in a box. Inside this box are several configuration fields: 'SIP Server:' with the value 'test.ivy.teliax.com', 'Remote SIP Port:' with '5060', 'Local SIP Port:' with '5061', 'Outbound Proxy:' (empty), 'Outbound Proxy Port:' with '0', 'User ID:' with 'CyberData03', 'Authenticate ID:' with 'CyberData03', 'Authenticate Password:' with a masked password '.....', and 'Re-registration Interval (in seconds):' with '360'. Below the settings box, a note states '* You need to reboot for changes to take effect'. At the bottom of the main area are two buttons: 'Save' and 'Reboot'.

CyberData Office Ringer

Home | **Device Config** | **Networking** | **SIP Config** | **Nightringer** | **Sensor Config** | **Multicast Config** | **Audio Config** | **Event Config** | **Autoprovisioning** | **Update Firmware**

Nightringer Configuration

Enable Nightringer: ☒ (Registered with SIP Server)

Nightringer Settings

SIP Server:	test.ivy.teliax.com
Remote SIP Port:	5060
Local SIP Port:	5061
Outbound Proxy:	
Outbound Proxy Port:	0
User ID:	CyberData03
Authenticate ID:	CyberData03
Authenticate Password:
Re-registration Interval (in seconds):	360

* You need to reboot for changes to take effect

5.0 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 Teliax solution may render this document obsolete. We welcome and encourage documentation feedback to ensure continued applicability.