



Zoom Configuration Guide: SIP Paging Adapter

Document Part # 931712A

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1.0 Setup Diagram

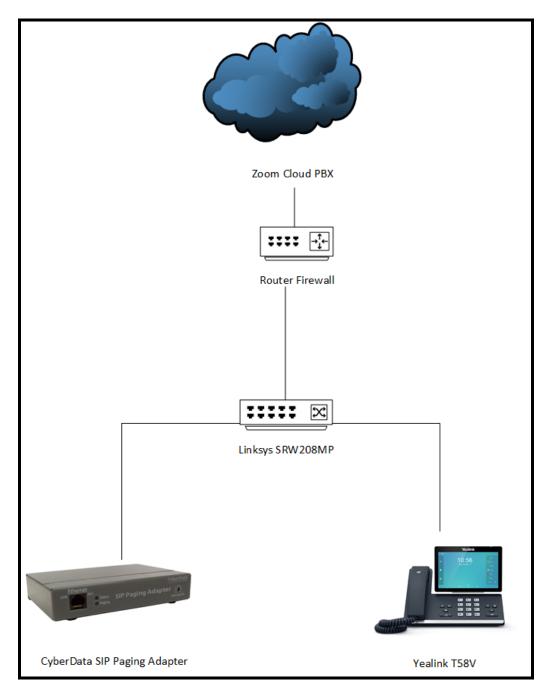


Figure 1-1: Interoperability Test Infrastructure



2.0 Test Setup Equipment

This section describes the products used for interoperability testing with Zoom.

Table 2-1: <u>Setup Equipment</u>

EQUIPMENT	MODEL or PART NUMBER	FIRMWARE VERSION
CYBERDATA SIP PAGING ADAPTER	011233	v11.8.0b16
YEALINK	T58A	58.83.3.6
LINKSYS SWITCH	SRW208MP	



3.0 Before You Start

This configuration guide documents the integration process of a CyberData SIP Paging Adapter.

Network Advisories

Zoom uses a Fully Qualified Domain Name (FQDN) for the SIP server and Outbound Proxy addresses. The CyberData SIP Paging Adapter needs to perform a DNS A query to resolve the IP address of Zoom's Outbound Proxy FQDN. It is necessary to ensure the configured DNS server(s) have an A record for the Outbound Proxy address.

In addition, be sure to verify the following ports are available for the paging adapter to use:

- TCP 5060-5061, 5091 (SIP)
- UDP 10500 (RTP)

The adapter will need to traverse the public internet in order to operate with Zoom in the cloud.

The adapter's paging extension uses SIP port 5060 to receive SIP messages. The Nightringer extension uses SIP port 5061 to receive SIP messages. Both extensions will send SIP messages to port 5091, the port used by Zoom's Outbound Proxy.

SIP ports 5060-5061 and RTP port 10500 are the default values on all noted firmware levels.

Alternatively, SIP ports for the paging and Nightringer extension are configurable on the **SIP** page of the web interface.

The RTP port setting on the **SIP** page is used for both extensions.

The CyberData Discovery Utility can be used to locate CyberData devices on your network. You may download it from the following web address: <u>https://www.cyberdata.net/pages/discovery</u>

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 adapter's product webpage:

SIP IP66 Outdoor Horn (011233)

http://files.cyberdata.net/assets/011233/011233_931087I_SIP_Paging_Adapter_Ops_Guide.pdf



4.0 Configuration Procedure: Common Area Phone

There are several different extension types that can be used on the Zoom platform. This guide provides instructions to register the CyberData SIP Paging Adapter as a Common Area Phone. Registering in a different capacity may require creating a user profile and providing an email address. See Zoom documentation for more details.

1. Log into Zoom.

https://zoom.us/signin

zoom	SOLUTIONS -	PLANS & PRICING	CONTACT SALES			JOIN A MEETING	HOST A MEETING 🗸	SIGN IN	SIGN UP, IT'S FREE
				Sign Ir	1				
				Email address					
				Email address					
				Password					
				Password					
				Sign In					
				Forgot password?	Stay signed in				
				Or, sign in with Google o	r Facebook				
				New to Zoom? Sign	Jp Free				

Figure 4-1: Log into Zoom



2. From the Profile page select the "Phone System Management" section and the 'Users & Rooms' subsection.

		REQUEST A DEMO 1.888.799.0121	i RESOURCES + SUPPO
SOUTIONS - PLANS & PRICIN	IG CONTACT SALES	SCHEDULE A MEETING KON A MEETING HOST A ME	ETING - 🧟 SIGN O
nportant Update: Zoom will update your account's mee	ting and webinar password set	igs on Sept.29, 2019 GMT (originally planned for Sept.22). To learn more or opt out of this change, click here	
ERSONAL Profile Meetings Webinars	Comp.	Paul Account No. :	Edit
Phone Recordings Settings	Personal Meeting ID	839-939 https://zoom.uk/y/839939 	Edit
MN	Personal Link	Not set yet.	Customize
Dashboard User Management Room Management	Sign-In Email:	Linked accounts:	Edit
Phone System Management	User Type	Pro 🛛	
Users & Rooms	Capacity	Meeting 300 Ø	
Auto Receptionists Call Queues	Language	English	Eda
Phone Numbers	Date and Time	Time Zone (GMT-7:00) Pacific Time (US and Canada)	Eda
Phones & Devices		Date Format mm/dd/yyyy Example: 08/15/2011	
Company Info		Tene Format >= Uie 24-hour time	
Account Management	Calendar and Contact Integration	You can integrate with 3rd party services or apps, such as Google, Outlook or Exchange, to sync the calendar and contacts.	D Help
Advanced			

Figure 4-2: Profile Landing Page

Note: Some text from the profile page has been hidden to protect sensitive information.



3. From the "Users & Rooms" page select 'Common Area Phones'.

ZOOM SOLUTIONS - PL	NS & PRICING CONTACT SALES	
Important Update: Zoom will update your acc	ount's meeting and webinar password settings on Sept.29, 2019 GMT (originally planned for S	ept.22).
PERSONAL	Users Zoom Rooms Common Area Phones	
Profile Meetings	US/CA Calling Plan Plan Details Unlimited: 5 (4 Available)	
Webinars Phone	Metered:	
Recordings Settings	Add Import Export Search by Name, Ext. or Number Q	
ADMIN	Assign Numbers Y Assign Calling Plan Y Apply Settings Remove Y	
Dashboard	Name ÷ Ext. ÷ Calling Plan(s)	
 > User Management > Room Management 	Cameron 803	
 Phone System Management 	Mauricio 802	
Users & Rooms Auto Receptionists	Paul (Owner) 800 US/CA Unlimited	
Call Queues	Page Size 15 • Total 3	

Figure 4-3: Phone System Management

Note: Some text from this page has been hidden to protect sensitive information.



4. From the "Common Area Phones" press the 'Add' Button to create a new common area phone to be used by the device.

Note: The MAC address of the amplifier will be required to create the common area phone.

ZOOM SOLUTIONS - PL	ANS & PRICING CONTACT SALES	
Important Update: Zoom will update your ac	count's meeting and webinar password s	ettings on Sept.29, 2019 GMT (originally pla
PERSONAL Profile	Users Zoom Rooms	Common Area Phones
Meetings Webinars	US/CA Calling Plan F Unlimited: 5 (4 Available) Metered:	Plan Details
Phone Recordings Settings	Add Search by Display Name, Ext.,	Number or MAC Address
ADMIN Dashboard	Assign Calling Plan ∨ Delete	∽ Ext. ≑ Calling
 > User Management > Room Management 	Call Button Test	806
 Phone System Management Users & Rooms 	Indoor Intercom	500

Figure 4-4: Common Area Phones

5. After clicking the Add button a Pop-up will appear that allows extension creation.



Figure 4-5: Common Area Phone Pop-up

Display Name	
Description (Optional)	
Extension Number	809
MAC Address	
Device Type	Select Brand Select Model

- 6. Set the **Display name** of the extension. This will be the main Identifier on the Common Area Phones page.
- 7. Set the description.
- 8. The extension number will be auto generated but can be changed if desired.
- 9. Set the MAC address of the device.

Figure 4-6: Common Area Phone Pop-up – Filled

Display Name	CyberData SIP Paging Adapter
Description (Optional)	Overhead paging
Extension Number	816
MAC Address	0020f703301e
Device Type	Other ~



10. Click the **Save** button to create the Common Area Phone.

11. Once created the new extension will appear in the list.

Figure 4-7: Common Area Phone list

Assign	Calling Plan 🗸 Delete 🗸							
0	Display Name 💲	Ext. ‡	Calling Plan(s)	Number(s)	Device Type	MAC Address	Status	
0	CyberData Intercom	809			Other	00-20-f7-02-bf-11	Offline Provision	Assign Calling Plan v
0	CyberData SIP Call Button Front Office	815	**		Other	00-20-f7-04-13-5c	Offline Provision	Assign Calling Plan v
0	CyberData SIP IP66 Outdoor Horn Warehouse	813			Other	00-20-f7-03-a3-2f	Offline Provision	Assign Calling Plan v
0	CyberData SIP Paging Adapter Overhead paging	816			Other	00-20-f7-03-30-1e	Offline Provision	Assign Calling Plan v

12. Press the "Provision" button on the extension that was just created.



Figure 4-7: Provisioning Pop-up

MAC Address	00-20-f7-03-30-1e
Device Type	Other
You will need to refer to your ma	enable TLS1.2 for SIP registration and enable SRTP for secure calling on your IP phone. Please anufacturer's instructions for these processes.
You'll need followin	g information for manual provisioning.
1. SIP Domain: 508	
2. Outbound Proxy	: us01sipsj0h.zoom.us:5091
3. User Name: 632	'certificate' button.
4. Authorization ID	
5. Password:	
	Ъ
Also, download CA	certificate and import to trust list on your IP phone.
provisioned in t	te that Zoom support team will not be able to troubleshoot or configure IP phones that are his manner. Some Zoom Phone features may not work on manually provisioned phones. It may
vary depending	on your desk phone model.

Note: CyberData Devices do not support SRTP at the time of writing this document.

- **13.** A popup will appear with manual provisioning information to setup the CyberData Paging Adapter. Keep this popup open.
- **14.** Make sure to download the "CA Certificate," which will be needed for device configuration.



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.

CyberData Setting	Zoom Provisioning Pop-up
Primary SIP Server	SIP Domain
Outbound Proxy	Outbound Proxy
Outbound Proxy Port	
Primary SIP User ID	User Name
Primary SIP Auth ID	Authorization ID
Primary SIP Auth Password	Password

Table 5-1	: Setting	Name	correlation
	. beams	1 vanie	conclation

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.

CyberData VoIP ProductDisco	very Utility v1.	2.0			X
Product Type	IP Address	MAC Address	Serial Number	Device Name	
Unknown VolP Product Unknown VolP Product	10.10.1.134 10.10.1.194	00:20:F7:03:F1:13 00:20:F7:03:30:1E	186200669 280100001	Outdoor Intercom CyberData SPA	
1					
Status: Idle		Scan	Deta	ails Launch B	rowser

Figure 5-1: CyberData Discovery Utility

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

Username: admin Password: admin



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Home	Device I	Network	SIP	Multicast	SSL	Fault	Audiofiles	Events	Autoprov	Firmware
	C	ybe	erD	ata	Ра	gin	g A	dap	ter	
Current Sta	atus			Admin Se	ttings			mport Set	tings	
Serial Number: Mac Address: Firmware Version:	280100001 00:20:f7:03:30: v11.8.0b16	:1e		Username: Password: Confirm Passwo	admin			Choose File No		
IP Addressing: IP Address: Subnet Mask: Default Gateway:				Save Reboo	t Toggle H	Help			ttings	
DNS Server 1: DNS Server 2:	10.0.1.56									
SIP Mode: Multicast Mode: Event Reporting: Nightringer:	Enabled Disabled Disabled Disabled									
Primary SIP Serve Backup Server 1: Backup Server 2: Nightringer Server	Not registered Not registered									

3. From the Home tab press the 'Device' Tab.



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Figure 5-3: Device Tab

Home Device N	Network SIP Multicas	t SSL	Fault	Audiofiles	Events	Autoprov	Firmware
Cy	yberData	a Pa	gin	g Ao	dapt	ter	
Line-in Settings			Relay S	ettings			
Enable Line-in to Line-out Loopba	ck 🔲			ay on Local Audio:			
Clock Settings			DTMF S	settings	_		
Set Time with NTP server on boot: NTP Server:			DTMF Durati		50		
Posix Timezone String (see manua	north-america.pool.ntp.org			F Menus (Go straig nfigured DTMF for			
Periodically sync time with server:			Zone:				
Time update period (in hours):	1		Manual DTM	F Entry for Analog	Zone:		
Current Time:	09:41:41		Require Sec	-			
Misc Settings			Security Cod	.e.			
Device Name: Beep on Init:	CyberData SPA						
Beep on Page:	 Image: A start of the start of						
Disable HTTPS (NOT recommende	ed): 🔲						
Test Audio Test Relay							
Save Reboot Toggle Help							

- 1. Check the box for "Set Time with NTP Server on Boot".
- 2. Change the NTP server if necessary.
- 3. Set the **Posix Timezone String** to the local area.

Note: See the operations manual for other time zone strings.

- 4. Check the box for "Periodically sync time with server".
- 5. Set the "Time update period (in hours)" to 1
- 6. <u>Save.</u>
- 7. Go to the SIP Tab.



Figure 5-4: SIP Tab

Су	berData	a Paging Ada	apter
SIP Settings Enable SIP operation: SIP Transport Protocol:	✓ TLS ▼ NTP enabled	Nightringer Settings Enable Nightringer: SIP Server:	10 0 0 253
TLS Version: Verify Server Certificate: Register with a SIP Server: Use Cisco SRST:	1.2 only (recommended)	Remote SIP Port: Local SIP Port: Outbound Proxy:	5060 5061
Primary SIP Server: Primary SIP User ID: Primary SIP Auth ID: Primary SIP Auth Password:	50882551.zoom.us 632510872533 724050968392	Outbound Proxy Port: User ID: Authenticate ID: Authenticate Password:	0 241 241
Backup SIP Server 1: Backup SIP User ID 1: Backup SIP Auth ID 1:		Re-registration Interval (in seconds): Call Disconnection	360
Backup SIP Auth Password 1: Backup SIP Server 2: Backup SIP User ID 2:		Terminate Call after delay: 0 Codec Selection	
Backup SIP Auth ID 2: Backup SIP Auth Password 2: Remote SIP Port:	5060	Force Selected Codec: ◀ Codec: PCMU (G.711	u-law) ▼
Local SIP Port: Outbound Proxy: Outbound Proxy Port:	5060 us01sipsj0h.zoom.us 5091	RTP Settings RTP Port 10500 (even):	
Disable rport Discovery: Buffer SIP Calls: Re-registration Interval (in seconds): Unregister on Boot: Keep Alive Period:	360 10000	Jitter Buffer: ⁵⁰	
Save Reboot Toggle Help			

- 8. Set the 'SIP Transport Protocol' to TLS.
- 9. Keep TLS version set to "1.2 Only (Recommended)".
- 10. Check the box for "Verify Server Certificate".
- 11. Set the **Primary SIP Server** to the SIP Domain from the configuration Popup.
- 12. Set the Primary SIP User ID to the Username from the configuration Popup.
- 13. Set the **Primary SIP Auth ID** to the Authorization ID from the configuration Popup.



- **14.** Set the **Primary SIP Auth Password** to the password provided in the configuration popup.
- **15.** Set the **Outbound proxy** and **Outbound Proxy port** to the address provided in the configuration popup.

Note: Make sure to separate the port from the outbound proxy information provided by zoom.

- 16. Check the box for "Force Selected Codec".
- 17. <u>Save.</u>
- 18. Go to the 'SSL' Tab.

Figure 5-5: SSL Tab

CyberData Paging Adapter					
Server CAs	Client Certificate	Test SSL Connection			
Choose Files No file chosen Import CA Certificate Restore Defaults Remove All	commonName = CyberData SIP Device validFrom = Jul 10 17:56:03 2018 GMT validTo = Jul 7 17:56:03 2028 GMT	Server: us01sipsj0h.zoom.us Port: 5060 Test TLS connection			
Apply/Reboot Toggle Help	Client CA				
List of Trusted CAs					

19. Press the 'Choose Files' button.



Figure 5-6:	Choose file Pop-up

C Open						X
COV Downloads		▼ ⁴ 9	Searc	h Downloads		Q
Organize 🔻 New folder				:==	•	0
 ☆ Favorites ■ Desktop Downloads Secent Places MAINFRAME TFTP-Root Firmware Images Interop Projects 2019 Tickets Libraries Documents Music Pictures Videos Xideos Computer Local Disk (C:) Network 	Name		* T	ītle		C
THURST	۲. III III III III III III III III III I					+
File name: sbc_ca.pen		·	All File		Cance	•

20. Select the "sbc_ca.pem" file and press the Open button.

21. Press the "Import CA Certificate" button to load the cert.



Figure 5-7: Import CA Certificate

CyberData Paging Adapter					
Server CAs	Client Certificate	Test SSL Connection			
Choose Files sbc ca bem Import CA Certificate Restore Defaults Remove All	commonName = CyberData SIP Device validFrom = Jul 10 17:56:03 2018 GMT validTo = Jul 7 17:56:03 2028 GMT	Server: us01sipsj0h.zoom.us Port: 5060 Test TLS connection			
Apply/Reboot Toggle Help	Client CA				

22. Once imported, confirm the file is listed with the other certificates.



Figure 5-8: Certificate List

22	ISRG_Root_X1.crt	Info	Remove
23	VeriSign_Class_3_Public_Primary_Certification_AuthorityG4.crt	Info	Remove
24	VeriSign_Class_3_Public_Primary_Certification_AuthorityG5.crt	Info	Remove
25	VeriSign_Universal_Root_Certification_Authority.crt	Info	Remove
26	Verisign_Class_1_Public_Primary_Certification_Authority.crt	Info	Remove
27	Verisign_Class_1_Public_Primary_Certification_AuthorityG3.crt	Info	Remove
28	Verisign_Class_2_Public_Primary_Certification_AuthorityG2.crt	Info	Remove
29	Verisign_Class_2_Public_Primary_Certification_AuthorityG3.crt	Info	Remove
30	Verisign_Class_3_Public_Primary_Certification_Authority.crt	Info	Remove
31	Verisign_Class_3_Public_Primary_Certification_AuthorityG3.crt	Info	Remove
32	sbc_ca.pem	Info	Remove
33	thawte_Primary_Root_CA.crt	Info	Remove
34	thawte_Primary_Root_CAG2.crt	Info	Remove
35	thawte_Primary_Root_CAG3.crt	Info	Remove

- **1.** Once the certificate is loaded a reboot will be required to make the changes take effect Use the "Apply/Reboot Button.
- **2.** Click Reboot in the Popup.

Figure 5-9: <u>Apply/Reboot Popup</u>

Reboot Device ×	c
The device must be rebooted before certificate settings can be applied. Reboot now?	
Cancel	



Once rebooted, "Registered" will appear in green in the "Status" section of the Home page.

Figure 5-10: <u>Home page – Registered</u>

Home	Device Netwo	rk SIP	Multicast	SSL	Fault	Audiofiles	Events	Autoprov	Firmware
	Cyl	berD	ata	Pa	gin	g A	dapt	ter	
Current St	atus		Admin Set	tings			mport Set	tings	
Serial Number: Mac Address: Firmware Version	280100001 00:20:f7:03:30:1e ; v11.8.0b16		Username: Password: Confirm Passwor	admin d:			Choose File No I	file chosen	
IP Addressing: IP Address: Subnet Mask: Default Gateway:	DHCP 10.10.1.194 255.0.0.0 10.0.0.1		Save Reboot	Toggle H	Help	1	Export Set	tings	
DNS Server 1: DNS Server 2:	10.0.1.56					1	Export Config		
SIP Mode: Multicast Mode: Event Reporting: Nightringer:	Enabled Disabled Disabled Disabled								
Primary SIP Serve Backup Server 1: Backup Server 2: Nightringer Serve	Not registered Not registered								



6.0 Configuration Procedure: Setting up the Nightringer extension

CyberData Setting	Zoom Provisioning Pop-up
SIP Server	SIP Domain
Outbound Proxy	Outbound Proxy
Outbound Proxy Port	
User ID	User Name
Authenticate ID	Authorization ID
Authenticate Password	Password

Table 6-1: Setting Name correlation

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.

CyberData VoIP ProductDiscov	very Utility v1.	2.0			X
Product Type	IP Address	MAC Address	Serial Number	Device Name	
Unknown VolP Product Unknown VolP Product	10.10.1.134 10.10.1.194	00:20:F7:03:F1:13 00:20:F7:03:30:1E	186200669 280100001	Outdoor Intercom CyberData SPA	
Status: Idle		Scan	Deta	Launch Br	owser

Figure 5-1: <u>CyberData Discovery Utility</u>

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

Username: admin Password: admin



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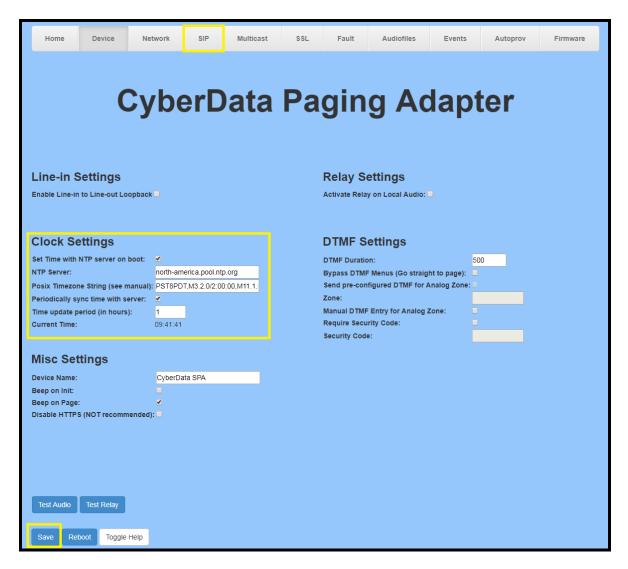


Home	Device	Network	SIP	Multicast	SSL	Fault	Audiofiles	Events	Autoprov	Firmware
	C	Sybe	erD	ata	Pa	gin	g A	dapt	ter	
Current Sta	atus			Admin Se	ttings			Import Set	tings	
Serial Number: Mac Address: Firmware Version:	28010000 00:20:f7:0 v11.8.0b1	3:30:1e		Username: Password: Confirm Passwor	admin			Choose File No Import Config	file chosen	
IP Addressing: IP Address: Subnet Mask: Default Gateway: DNS Server 1: DNS Server 2:	DHCP 10.10.1.19 255.0.0.0 10.0.0.1 10.0.1.56	94		Save Reboo	t Toggle H	lelp		Export Set	tings	
SIP Mode: Multicast Mode: Event Reporting: Nightringer:	Enabled Disabled Disabled Disabled									
Primary SIP Serve Backup Server 1: Backup Server 2: Nightringer Server	Not registe Not registe	ered ered								

3. From the Home tab press the 'Device' Tab.



Figure 5-3: Device Tab



- 4. Check the box for "Set Time with NTP Server on Boot".
- 5. Change the NTP server if necessary.
- 6. Set the Posix Timezone String to the local area.

Note: See the operations manual for other time zone strings.

- 7. Check the box for "Periodically sync time with server".
- 8. Set the "Time update period (in hours)" to 1.
- 9. <u>Save.</u>
- **10.** Go to the SIP Tab.



Figure 5-4: SIP Tab

Су	berData	a Pa	ging A	da	apte	er	
SIP Settings			Nightringer Sett	tings			
SIP Settings Enable SIP operation: SIP Transport Protocol: TL S Version: Verify Server Certificate: Register with a SIP Server: Use Cisco SRST: Primary SIP Server: Primary SIP User ID: Primary SIP Auth ID: Primary SIP Auth ID: Primary SIP Auth Password: Backup SIP Server 1: Backup SIP User ID 1: Backup SIP Auth ID 1: Backup SIP Auth ID 1: Backup SIP Auth Password 1: Backup SIP Server 2: Backup SIP Server 2: Backup SIP Muth Password 2: Remote SIP Port: Local SIP Port: Outbound Proxy: Outbound Proxy Port: Disable rport Discovery: Buffer SIP Calls: Re-registration Interval (in seconds)	2 0 0 1.50 10 0 1.50 123 456 5060 5060 5060	V	Enable Nightringer: SIP Server: Remote SIP Port: Local SIP Port: Outbound Proxy Port: User ID: Authenticate ID: Authenticate ID: Authenticate Password: Re-registration Interval (in : Call Disconnect Terminate Call after delay: Force Selected Codec:	seconds): tion		pom.us	
Unregister on Boot: Keep Alive Period: Save Reboot Toggle Help	10000						

- 11. Set the 'SIP Transport Protocol' to TLS.
- 12. Keep TLS version set to "1.2 Only (Recommended)".
- 13. Check the box for "Verify Server Certificate".
- 14. Set the SIP Server to the SIP Domain from the configuration popup.
- **15.** Set the **User ID** to the Username from the configuration popup.
- 16. Set the Authenticate ID to the Authorization ID from the configuration popup.
- 17. Set the Authenticate Password to the password provided in the configuration popup.
- **18.** Set the **Outbound proxy** and **Outbound Proxy port** to the address provided in the configuration Popup.
- *Note: Make sure to separate the port from the outbound proxy information provided by zoom.* **19.** Check the box for "**Force Selected Codec**".
 - 20. <u>Save.</u>



21. Go to the 'SSL' Tab.

Figure 5-5: SSL Tab

Cyber	Data Pagin	g Adapter
Choose Files No file chosen Import CA Certificate Restore Defaults Remove All Apply/Reboot Toggle Help	commonName = CyberData SIP Device validFrom = Jul 10 17:56:03 2018 GMT validTo = Jul 7 17:56:03 2028 GMT Client CA	Server: us01sipsj0h.zoom.us Port: 5060 Test TLS connection

22. Press the 'Choose Files' button.



😋 Open				l	X
COV Downloads		▼ 47	Search Downloads		٩
Organize 🔻 New folder			:==	•	0
 ★ Favorites E Desktop Downloads Recent Places MAINFRAME TFTP-Root Firmware Images Interop Projects 2019 Tickets E Documents Music Pictures Videos Koal Disk (C:) Network 	Name sbc_ca.pem		# Title		
File name: sbc_ca.pem	<u>د</u> ا	•	All Files (*.*) Open 💌	Cancel	•

23. Select the "sbc_ca.pem" file and press the Open button.

24. Press the "Import CA Certificate" button to load the cert.



Figure 5-7: Import CA Certificate

CyberData Paging Adapter				
Server CAs	Client Certificate	Test SSL Connection		
Choose Files sbc ca bem Import CA Certificate Restore Defaults Remove All	commonName = CyberData SIP Device validFrom = Jul 10 17:56:03 2018 GMT validTo = Jul 7 17:56:03 2028 GMT	Server: us01sipsj0h.zoom.us Port: 5060 Test TLS connection		
Apply/Reboot Toggle Help	Client CA			

25. Once imported, confirm the file is listed with the other certificates.



Figure 5-8: Certificate List

22	ISRG_Root_X1.crt	Info	Remove
23	VeriSign_Class_3_Public_Primary_Certification_AuthorityG4.crt	Info	Remove
24	VeriSign_Class_3_Public_Primary_Certification_AuthorityG5.crt	Info	Remove
25	VeriSign_Universal_Root_Certification_Authority.crt	Info	Remove
26	Verisign_Class_1_Public_Primary_Certification_Authority.crt	Info	Remove
27	Verisign_Class_1_Public_Primary_Certification_AuthorityG3.crt	Info	Remove
28	Verisign_Class_2_Public_Primary_Certification_AuthorityG2.crt	Info	Remove
29	Verisign_Class_2_Public_Primary_Certification_AuthorityG3.crt	Info	Remove
30	Verisign_Class_3_Public_Primary_Certification_Authority.crt	Info	Remove
31	Verisign_Class_3_Public_Primary_Certification_AuthorityG3.crt	Info	Remove
32	sbc_ca.pem	Info	Remove
33	thawte_Primary_Root_CA.crt	Info	Remove
34	thawte_Primary_Root_CAG2.crt	Info	Remove
35	thawte_Primary_Root_CAG3.crt	Info	Remove

- **3.** Once the certificate is loaded a reboot will be required to make the changes take effect Use the "Apply/Reboot Button.
- **4.** Click Reboot in the popup.

Figure 5-9: <u>Apply/Reboot Popup</u>

Reboot Device	×
The device must be rebooted before certificate settings can be applied. Reboot now?	
Cancel	



Once rebooted, "Registered" will appear in green in the "Status" section of the Home page.

Figure 5-10: <u>Home page – Registered</u>

Home	Device Network	SIP	Multicast	SSL	Fault	Audiofiles	Events	Autoprov	Firmware
	Cyb	erD)ata	Pa	gin	g Ao	dapt	ter	
Current Sta	itus		Admin Set	ttings		Ir	mport Set	tings	
Serial Number: Mac Address: Firmware Version:	280100001 00:20:f7:03:30:1e v11.8.0b16		Username: Password: Confirm Passwor	admin			Choose File No f	file chosen	
IP Addressing: IP Address: Subnet Mask: Default Gateway: DNS Server 1: DNS Server 2:	DHCP 10.10.1.194 255.0.00 10.0.0 10.0.1		Save Rebool		Help		Export Set	tings	
SIP Mode: Multicast Mode: Event Reporting: Nightringer:	Enabled Disabled Disabled Enabled								
Primary SIP Server Backup Server 1: Backup Server 2: Nightringer Server	Not registered Not registered								



7.0 Using the CyberData SIP Paging Adapter in a Zoom system.

Once the adapter is registered with Zoom, it can be used in several ways. The unit can be directly called by dialing the extension number of the unit. It is also possible to add the unit to a call queue to reach multiple endpoints simultaneously. Keep in mind that with a call queue, multiple devices will ring, but only one device may answer. Due to this operation it is not possible to page to multiple devices at once.

To page multiple devices simultaneously, CyberData recommends using Multicast, which can be sent from most modern SIP phones (e.g. Yealink, Poly, Snom) or a <u>CyberData Paging Server</u> or <u>Multicast Microphone</u>. (Consult your phone's documentation to enable multicast).

Please reference our <u>Connecting to Compatible Analog Amplifiers</u> page for wiring diagrams for many different amplifiers that can be used with the paging adapter.

Note: If the amplifier used in your system is not on our list please reach out to our Support department to see if it is compatible. If so, a connection diagram will be created.



7.1 Creating a Call queue

CyberData recommends using the Nightringer extension as part of a call queue, allowing the adapter to also serve as an additional notification for incoming calls.

1. From the Phone System Management page select call queues and press the Add button to create a new queue.

	ANS & PRICING CONTACT SALES	
Important Update: Zoom will update your ac	count's meeting and webinar password settings on	Sept.29, 2019 GMT (originally p
PERSONAL	0.11.0	
Profile	Call Queues	
Meetings	Add	
Webinars	Search by Name or Ext.	Q
Phone	Name ¢	Ext. ÷
Recordings	0	600
Settings	Queue	600
ADMIN	Page Size 15 • Total 1	
Dashboard		
> User Management		
> Room Management		
 Phone System Management 		
Users & Rooms		
Auto Receptionists		
Call Queues		
Phone Numbers		
Phones & Devices		
Call Log		
Company Info		

Figure 7-1: Add call queue

2. After clicking 'Add' a pop-up will appear that allows naming and assigning a number to the call queue.



Figure 7-2: <u>Name the queue</u>

Call Queues > Add	
Name	
Description (Optional)	
Extension Number	809
Member(s)	Add
Save	

3. Name the queue, set a description and change the extension number if necessary.

Figure 7-3: Add users

Call Queues > Add	
Name	Sales Line
Description (Optional)	Incoming sales calls
	le le
Extension Number	809
Member(s)	Add
Save Cancel	

4. Press the Add button to add Users and Common Area Phones to the queue.



Figure 7-4: Add Users

Users	Common A	rea Phones				Selected	
Search by	y Name or Ext.		Q			Users (3)	
Na	ame	Email		Ext.	User Status	Cameron	×
🕑 Ca	ameron	1		803	Active	Mauricio	×
 ✓ 	auricio			802	Active	Paul	×
🕑 Pat	ul'			800	Active		
Page Size	10 -	Total 3					

- 5. Select the users who will participate in the call group, then select "Common Area Phones."
- 6. In the "Common Area Phones" section, select the phones you wish to add to the queue.



Figure 7-5: Add Common Area Phones

Choose Member(s)		
Users Common Area Phones		
Search by Display Name or Ext. Q		Selected CyberData SIP Pag ×
 Display Name 	Ext.	
CyberData SIP Paging Adapter	816	
Intercom	812	
CyberData SIP Call Button	815	
Indoor Intercom	500	
Page Size 10 • Total 4		
		Cancel

- 7. Click "OK" to confirm your selections.
- 8. Finally, press 'Save' to complete the queue.



Call Queues > Add	
Name	Sales Line
Description (Optional)	Incoming sales calls
Extension Number	809
Member(s)	Selected 6 Member(s) Add
Save	

Figure 7-6: Call queue complete



8.0 Contact CyberData Corporation

Sales

For sales-related questions, please visit our <u>Contact CyberData Sales</u> web page for more information.

Technical Support

For CyberData Technical Support, please submit a <u>Contact CyberData VoIP Technical Support</u> 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 Zoom PBX solution may render this document obsolete. We welcome and encourage documentation feedback to ensure continued applicability.