



RING CENTRAL CONFIGURATION GUIDE: SIP PAGING SERVER

Document Part #931042F

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RingCentral Configuration Guide: SIP Paging Server Document #931042F

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Revision Information

Revision 931042C was released on March 17th, 2015, and has the following changes:

• Added Polycom Paging sub-section to <u>Section 3.0 "Installation Options."</u>

Revision 931042D was released on September 18th, 2017 with the following changes:

• Updated Device photos and registration process

Revision 931042E was released on April 1st, 2019 with the following changes:

- Updated RingCentral Screenshots and added phone extension registration process
- Removed FAQ section due to redundant information.
- Added 'Digital Line' Registration process.

Revision 931042F was released on June 8th, 2020.

• Corrected mistakes with nomenclature.



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1.0 Setup Diagram

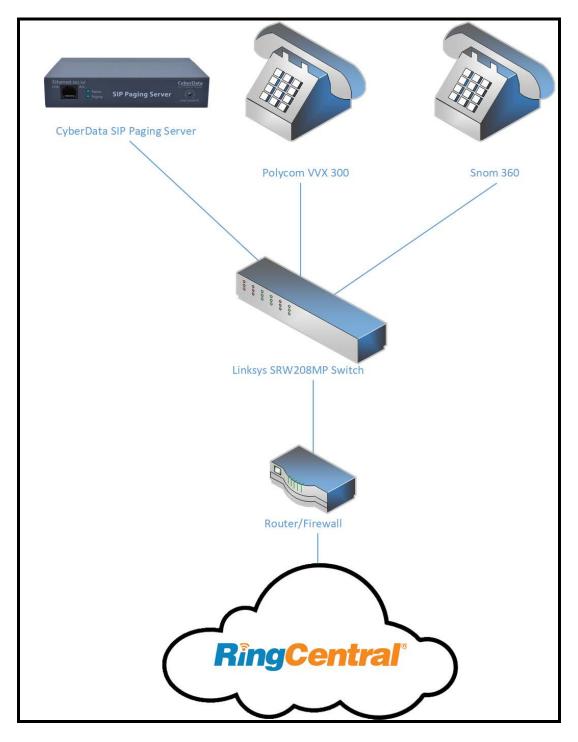


Figure 1-1. Interoperability Test Infrastructure



2.0 Test Setup Equipment

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

Table 2-1. Setup Equipment

EQUIPMENT	MODEL or PART NUMBER	FIRMWARE VERSION
CYBERDATA PAGING SERVER	011146	v12.2.0
POLYCOM	VVX 300	5.2.0.8330
SNOM	360	snom360-SIP 8.4.31
LINKSYS	SRW208MP	1.0.4



3.0 Installation Options

This section describes two possible types of paging using a CyberData SIP Paging Server in a RingCentral installation:

- IP Paging
- IP to Analog Paging

Each solution is an example and not an exhaustive list of all possible installation options. It is common to install a SIP Paging Server for the purpose of aggregating multicast-supported IP phones, IP paging devices, and analog paging equipment or any combination thereof.

The CyberData SIP Paging Server offers a robust feature set by serving both IP and analog pages to a combination of multicast-enabled IP paging endpoints in addition to legacy analog amplifiers and zone controllers that may already be installed in a particular location. The SIP Paging Server facilitates a versatile and scalable overhead paging solution.

IP Paging is supported by accepting audio from a SIP call and serving the page as a multicast to up to 100 configurable multicast addresses. Each group, consisting of a unique multicast address and port number, can be password controlled for added security. Page menu options are voice prompted and can be selected by entering digits into a RingCentral IP phone.

Additionally, the SIP Paging Server supports Polycom Group Paging mode and can transmit multicast pages to Polycom IP phones using UC Software 4.0.0 and higher.

When a multicast page is sent to the multicast-enabled endpoints on the network in a page group, such as CyberData IP speakers and Paging Amplifiers. The group page may also be forwarded to the analog Page Port and RCA Line Level outputs connected to legacy analog amplifiers and zone controllers. The Paging Server also supports dry relay contacts for contact closure to initiate a page where required for Page Port or RCA Line Level input connections to analog devices.

Our VoIP Technical Support team maintains a matrix of compatible analog amplifiers on our website that may be used to verify compatibility and view/download sample wiring diagrams for connections from a SIP Paging Server. The CyberData "Connecting to Compatible Analog Amplifiers" matrix is available on our website here: https://www.cyberdata.net/pages/connecting-to-analog-amplifiers/

Please <u>Contact CyberData VoIP Technical Support</u> for assistance with verifying connections from a SIP Paging Server to a specific analog amplifier or zone controller before purchasing a device.



Need to tie in background music? Incorporating background music from an analog RCA Line Level source can be realized using the RCA Level Input on the SIP Paging Server with an option to loop audio from the input to the analog Page Port or RCA Line Level outputs. All CyberData IP endpoints can join multicast groups and prioritize broadcasts based on configurable prioritized groups.

The paramount advantage to choosing a CyberData SIP Paging Server is the ability to aggregate paging endpoints, whether analog, digital, or both, using only one RingCentral user extension for a cost-effective and comprehensive overhead paging solution.

IP Paging Solution

There is no better time like the present to install an IP Paging solution using SIP and multicast technologies on a computer network. Eliminate messy, complicated wiring by installing a SIP Paging Server and any of PoE, multicast-enabled IP paging endpoints from CyberData.

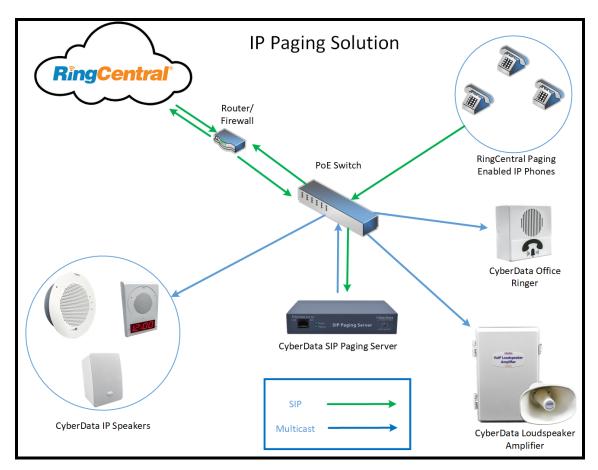


Figure 3-1. IP Paging Solution



IP to Analog Paging

Extend the longevity of an analog paging infrastructure and convert to IP Paging simply by adding a flexible and scalable CyberData SIP Paging Server for an IP to Analog Paging solution.

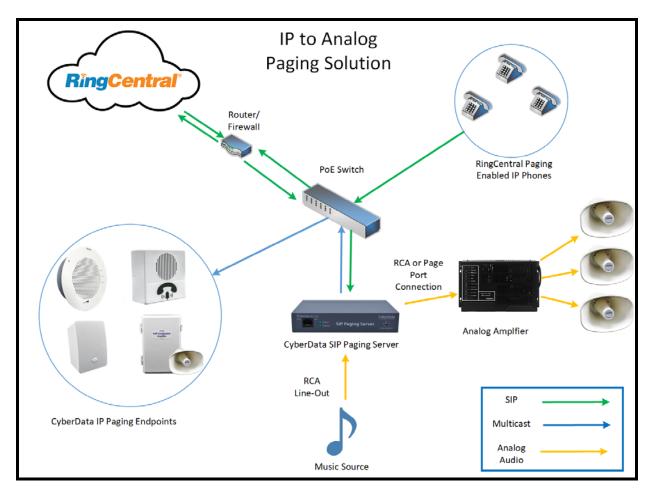


Figure 3-2. IP to Analog Paging Solution



Polycom Group Paging

Expand the IP paging solution by aggregating a legacy analog overhead paging infrastructure with Polycom IP phones using the CyberData SIP Paging Server.

The SIP Paging Server sends multicast pages to CyberData IP Paging Endpoints and Polycom IP phones in addition to forwarding pages and background music to a flexible analog interface for a comprehensive paging solution.

A single phone call to the SIP Paging Server's extension can reach all multicast-enabled devices on the local network and overhead speakers at the same time.

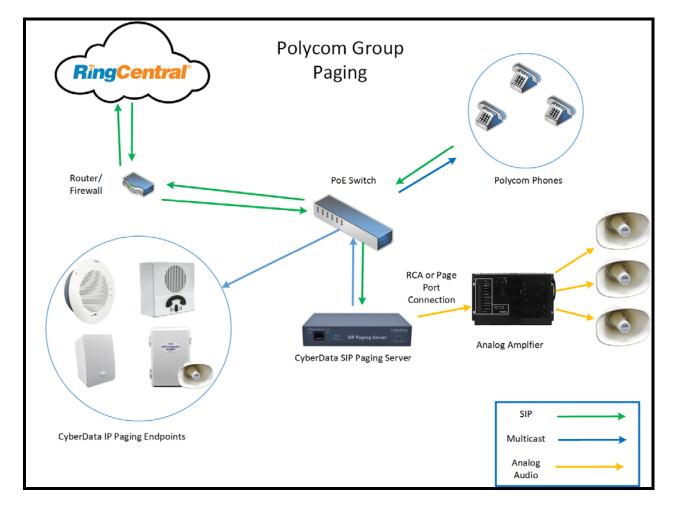


Figure 3-3. Polycom Group Paging



Features

- Voice prompted paging menu
- Up to 100 configurable, password-controlled zones or "paging groups"
- DTMF zone selection for IP zone control
- DTMF pass-through for analog zone control
- Dry relay contact closure for page initiation
- Delayed paging
- Web-based graphical user interface or TFTP/HTTP remote configuration
- RCA Line Level input connection for background music
- RCA Line Level output (10k Ohms @ 2 VPP)
- Page Port output (600 Ohms @ 5 VPP)

Caveats

Please be advised only multicast-supported IP phones may be aggregated into a multicast paging group. Currently, other than Polycom IP Phones capable of running UC Software version 4.0.0 and higher, RingCentral sells the following models tested for compatibility through a CyberData reseller:

- Yealink T42S
- Yealink T46S
- Cisco SPA 514G *
- Cisco SPA 525G *

*These models support up to 2 multicast groups (multicast address and port number) when running firmware version 3.2.2. Refer to Cisco documentation for configuration details.

CyberData has a list of multicast-supported IP Phones on our website here: <u>http://www.cyberdata.net/assets/011146/930631C_SIP_PAGING_SERVER_COMPATIBILITY_GUIDE.pdf</u>

A complete list of IP phones tested with RingCentral is published in RingCentral Knowledge Article 3619.



4.0 Before You Start

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

Network Advisories

RingCentral uses a Fully Qualified Domain Name (FQDN) for the SIP server and Outbound Proxy addresses. The CyberData Paging Server needs to perform a DNS A query to resolve the IP address of RingCentral'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 Server to use:

- UDP 5060-5061, 5090 (SIP)
- UDP 10500 (RTP)

The Paging Server will need to traverse the public internet to operate with RingCentral.

The Paging Server's primary 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 5090, the port used by RingCentral'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 Configuration** page of the web interface.

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

Product Documentation and Utilities

Before starting, download the Operation and Quick Start guides from the Paging Server's product webpage: https://www.cyberdata.net/collections/sip/products/011146

The CyberData Discovery Utility can be used to locate CyberData devices on the local network. It may be downloaded from CyberData's website with the following link: http://www.cyberdata.net/assets/common/discovery.zip

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



5.0 Configuration Procedure: Paging Extension

When integrating with RingCentral, the Paging Server can be provisioned as a paging device. Provisioning as a Paging Device does not allow the caller to receive audio from the paging server to hear voice prompts from the page menu or enter DTMF digits for page menu selections, group passwords, or pass-through to an analog amplifier or zone controller for analog zone control. However, the Paging Device extension is included free with an account and does not add an additional charge per month.

Add a Paging Device

This section describes the process of creating a user, provisioning a paging device, and registering the Primary extension used for paging with RingCentral. First, a user must be created for the Paging Server.

Use the following steps to create a user and provision a paging device extension for the Paging Server's primary extension through the RingCentral Admin Portal.

1. Login to the RingCentral Admin Portal at <u>https://service.ringcentral.com</u>.

RingCentral	RingCentral
	Sign In
	(831) 223-4700
abro de Callo	Next
	Or sign in with
RingCentral	G Google ⊙ Single Sign-on
Referral Program	
Refer a new customer and earn valuable rewards.	New to RingCentral? Sign up here
Refer	

Figure 5-1. RingCentral Admin Portal Login



2. From the Phones & Devices menu, select Paging Devices, and then click Add Device.

RingCentral [*]				Admin Portal V Get Help Log Out
Phone System Users	Reports ~ Call Log	Billing Tools ~		r "ů, 📞 🗊
Company Info	User Phones Com	non Area Phones Paging Devices	Shared Lines Unassigned	
V Phone Numbers	Search Paging Devices	Q Status ~		+ Add Device
Q Auto-Receptionist	1 Delete			
	Status	Name	✓ Assigned Groups	
7 Group(s) 0 Other(s)	• •	Interop 4Port		Delete
		Interop Paging Amp	Interop	Delete
Phones & Devices	•	Interop SPA	Interop	Delete
	• •	Interop Speaker	Interop	Delete
		Kenny Paging Amp	Kenny	Delete
	• •	name		Delete
		Paging Amp Nightringer		Delete
		QA Paging Server	QA	Delete
		<u>Spa Nightringer</u>		Delete
		<u>TechSupportSPA</u>	TechSupport	Delete

Figure 5-2. Add Device

3. A popup window labeled **Add Paging Device** will appear. Set the **Paging Device Nickname**, and then click **Next**.



Figure 5-3. Add Paging Device - Nickname

	Add Pagin	g Device		×
	1 Device Nickname	2 Provisioning Info		
The following paging devices are supported b - CyberData SIP-enabled IP V2 Paging Spea - CyberData SIP-enabled IP V2 Paging Ampl Paging Device Nickname CyberData SIP Paging Server	ker			
			Cancel	ext

4. A popup window labeled **Generic Paging Device Provisioning** will appear. Use the provisioning information to register the paging server's primary extension with RingCentral.



Figure 5-4. Provisioning Information

	Add Pa	ging Device			
	✓ Device Nicknam	e 2 Provisioning Info			
Provisioning information	for CyberData paging devices				
	es need to be programmed with the infor n assigned to paging group.	nation given below to make			
Step 1 Open a web browser session to the CyberData device. Please consult the vendor documentation for details on how to determine the IP address of your device and how to enter the relevant login credentials. Step 2 Navigate to the Networking page and confirm that the device is configured for DHCP operation.					
-	ng page and confirm that the device is co	nfigured for DHCP operatior	1.		
Step 3	guration page and enter the following set				
Step 3 Navigate to the SIP Cofi	guration page and enter the following set				
Step 3 Navigate to the SIP Cofin and Click "Save". The de	guration page and enter the following set				
Step 3 Navigate to the SIP Cofin and Click "Save". The de	guration page and enter the following set evice may reboot.				
Step 3 Navigate to the SIP Cofig and Click "Save". The de Field SIP Domain	guration page and enter the following set evice may reboot. Value sip.ringcentral.com				
Step 3 Navigate to the SIP Cofin and Click "Save". The de Field SIP Domain Remote SIP port	guration page and enter the following set evice may reboot. Value sip.ringcentral.com 5060				
Step 3 Navigate to the SIP Cofig and Click "Save". The de Field SIP Domain Remote SIP port Local SIP port	guration page and enter the following set evice may reboot. Value sip.ringcentral.com 5060 5060				
Step 3 Navigate to the SIP Cofig and Click "Save". The de Field SIP Domain Remote SIP port Local SIP port Outbound Proxy	guration page and enter the following set evice may reboot. Value sip.ringcentral.com 5060 sip20.ringcentral.com				
Step 3 Navigate to the SIP Cofig and Click "Save". The de Field SIP Domain Remote SIP port Local SIP port Outbound Proxy Outbound Proxy Port	guration page and enter the following set evice may reboot. Value sip.ringcentral.com 5060 5060 sip20.ringcentral.com 5090				
Step 3 Navigate to the SIP Cofig and Click "Save". The de Field SIP Domain Remote SIP port Local SIP port Outbound Proxy Outbound Proxy Port User Name	guration page and enter the following set evice may reboot. Value sip.ringcentral.com 5060 5060 sip20.ringcentral.com 5090 18312234700*803291212011				

Note: The Password has been obscured. These values are published only for reference.

5. Next, add the new Paging Device to a *Paging Only* group. From the **[n] Groups** menu, select **Paging Only**, then click **New Paging Group**.



Figure 5-5. Add Group

RingCentral			🖉 CyberData 🗸	(831) 223-4700 Ext. 101 Admin P	ortal 🗸 Get Help Log Out
Phone System Users	Reports ~	Call Log Billing Tools ~			R .°. L I
Company Info	Call Que	Paging Only Shared Lines	Park Locations Call Monitorin	g Others	
CH Phone Numbers	Paging Or Search	nly groups enable real-time one-way broadcastin	g through multiple desk phones and ov	verhead paging devices. <u>Learn More</u>	+ New Paging Only
Q Auto-Receptionist	Status	Name ~	Devices	Ext.	
7 Group(s) 0 Other(s)	۲	Interop	Interop Speaker	11	Disable
o Other(s)	0	Interop2	Interop SPA	12	Disable
Phones & Devices	ø	Kenny	Kenny Paging Amp	3	Disable
	0	QA	QA Paging Server	8	Disable
	0	QA Paging		10	Disable
	ø	TechSupport	TechSupportSPA	7	Disable

6. A popup window labeled Add Paging Group will appear. Enter an available extension number and name for the *Paging Only* group, then click Save.



Figure 5-6. Add Paging Group

	Add Paging Group	×
Group Name CyberData Paging Group		
Extension Number		
	Cancel	

7. A confirmation screen will confirm the paging group has been created. Select **Yes** to configure paging settings.



Figure 5-7. Confirmation

Confirmation	×
Group CyberData Paging Group added successfully. This group has the paging feature enabled. For paging to work properly, you must configure paging-related settings. Would you like to configure it now?	
No, I will do it later Yes	

8. Verify the new paging group appears in the **Groups** list. Select the paging group and a menu will appear to the far right of the screen. From this menu, select **Paging**.

Figure 5-8. Group Paging Menu

RingCentral Phone System Users	Reports v Call Log Billing Tools	⊘ CyberData ~ (831) 223-4700 Ext. 101 Admin Portal ~ Get Help Lo Is ~ (0) A.	og Out छ
Company Info	Call Queues Paging Only Shared Line Paging Only groups enable real-time one-way broad	nes Park Locations Call Monitoring Others adcasting through multiple desk phones and overhead paging devices. <u>Learn More</u>	
Q Auto-Receptionist	Search Q.	+ New Paging Only	×
8 Group(s) 0 Other(s)	CyberData Paging Group	CyberData Paging Group (Ext. 13)	
Phones & Devices	Interce Interce2	Extension Number Group Name 13 CyberData Paging Group	
	 Kenny QA 	Status Enabled	
	QA Paging TechSupport	Disable	
	CONCEPT	Cancel Service	
		✓ Paging	
	• 8 •		

9. From the **Paging** menu, select **Devices to Receive Page**, then check the devices to add to the group and press **Save**.



Figure 5-9. Devices to Receive Page

~	Paging			
De	Devices to Receive Page Users Allowed to Page this Group			
Only	-Paging capable phones are	displayed in the list. You can select up to 25 devices.		
Se	arch Q	Phone Type: All Phone T 🗸		
Sho	w All Show Selected (2)			
	Phone Type	Phone Name v	Ext.	
	User Phone	Christina PolycomVVX300	104	
	Paging Device	CyberData Paging Amp	-	
۲	Paging Device	CyberData SIP Paging Server	-	
	Paging Device	Interop 4Port	-	
	Paging Device	Interop SPA	-	
	Paging Device	Interop Speaker	-	
	Paging Device	Kenny Paging Amp	-	
	Paging Device	name	-	
	Paging Device	Paging Amp Nightringer	-	
	Paging Device	QA Paging Server	-	
Tota	: 14	Show: 10 v < 1	2 >	
		Cancel	Save	

10. Next, select **Users Allowed to Page this Group** to designate users with paging privileges. Check the box next to the users desired then press **Save**.



∧ Paging				
De	vices to Receive Page	Users Allowed to Page this Group		
Se	earch C	All Departments ~		
Sho	w All Show Selected (3)			
	Name	~ Ext. Department		
	Available User2	945		
	Cameron Device	934		
	Cameron Nightringer	935		
	Cameron Snom	932		
	CyberData Corporation	101		
	Group User	943		
•	Interop PolycomVVX300	104		
>	Interop Snom360	103		
	Interop Strobe	942		
	Kenny phone 2	938		
Total	: 23	Show: 10 • (1 2 3 >		
		Cancel		

Figure 5-10. Users Allowed to Page This Group

11. The page redirects back to the group's paging menu after clicking **Save.** Proceed to **Configure SIP Parameters**.



Configure SIP Parameters

One may feel more comfortable with web-based configuration or provisioning using templates. Both methods are documented in this configuration guide. Be sure to review the paging server's operation guide for complete information on configuration through the web interface and CyberData's "autoprovisioning" method using templates via HTTP, HTTPS, and TFTP protocols.

Primary SIP Server field	From the Paging Device Provisioning Information popup: SIP Server/SIP Domain
Primary SIP User ID field	From the Paging Device Provisioning Information popup: User Name
Primary SIP Auth ID field	From the Paging Device Provisioning Information popup: Authorization ID
Primary SIP Auth Password field	From the Paging Device Provisioning Information popup: Password
Outbound Proxy field	From the Paging Device Provisioning Information popup: Outbound Proxy
Outbound Proxy Port field	From the Paging Device Provisioning Information popup: Outbound Proxy Port
Re-registration Interval (in seconds) field	30
Keep Alive Period field	0
Force Selected Codec checkbox Codec dropdown	Yes PCMU (G.711, u-law)

Table 5-1. CyberData Configuration Settings



Web Configuration

If configuring through the web interface, use the following steps to login to the web interface of the CyberData device.

- **1.** Click **Launch Browser** from the CyberData Discovery Utility or point a browser to the CyberData device's IP address to access the Home Page of the web interface.
- 2. Enter the default credentials when prompted and click the Log In button.

Username: admin Password: admin

ndex ×	
← → 🗙 🗋 10.10.1.27	
	Authentication Required
	The server http://10.10.1.27:80 requires a username and password. The server says: CyberData Paging Server.
	User Name:
	Password:
	Log In Cancel

Figure 5-11. Web Interface Login





Home	Device	Network	SIP	PGROUPS	Schedules	Fault	Audiofiles	Events	Autoprov	Firmware
	Су	/bei	Da	ata v	3.1	Pag	ging	Sei	rver	
Current S	Status			Admin S	ettings		Im	port Sett	ings	
Serial Number: Mac Address: Firmware Versi	00:20:f7:			Username: Password: Confirm Passy	admin		Cho	pose File No fil		
IP Addressing: IP Address: Subnet Mask:	10.10.1.1 255.0.0.0	1000		Save Ret	oot Toggle Help		Ex	port Sett	ings	
Default Gatewa DNS Server 1: DNS Server 2:	iy: 10.0.0.1 10.0.1.56	5					Ex	port Config		
SIP Mode: Event Reportin Nightringer:	Enabled g: Disabled Disabled									
Primary SIP Se Backup Server Backup Server Nightringer Sel	1: Not regis 2: Not regis	itered								

3. On the Home Page, click **Device** on the top toolbar of the screen to access the Device Configuration page.

Note: The firmware version and registration status for the paging extension and Nightringer extensions appear here.

4. On the Device tab, check the box for **Bypass DTMF** in the **Misc. Settings** section.



Figure 5-13. Device Tab – Bypass DTMF

Home	Device	Network	SIP	PGROUPS	Schedules	Fault	Audiofiles	Events	Autoprov	Firmware
CyberData v3.1 Paging Server										
Line-in S	ettings				R	elay Set	tinas			
Enable Line-in Enable Line-in Multicast Addr Multicast Port: Detect Line-in	to Line-out Lor to Multicast: ress:	224.1.2 2000	.3]			on Local Audio: 🗆			
Clock Se	ettings				IV	lisc Sett	ings			
Set Time with I	NTP server on I	boot: 🛄			De	vice Name:		CyberData	Paging Server	
NTP Server:		north-a	merica.pool.	ntp.org	В	pass DTMF			0.0	
Posix Timezon	e String (see m	nanual): PST8P	DT,M3.2.0/2	00:00,M11.1.	D	MF Duration:		500		
Periodically sy	nc time with se	erver:			Be	ep on Init:				
Time update p	eriod (in hours)): 24			Be	ep on Page:		2		
Current Time:		16:01:3	87		Po	olycom Transn	n Paging on Multic nit Channel: (NOT recommende	1 🔻		
Save Ret	poot									

- 5. Then press **Save**. Once the page has reloaded press **SIP** to go to the SIP Configuration Tab.
- 6. Enter the provisioning information from the Assisted Generic IP Phone Provisioning popup window.

Note: The Local SIP Port is set to 5060 on default and is used by the paging server as its source port for the primary extension configured on this page.

- 7. Set the *Re-registration Interval (in seconds)* to **30 seconds**.
- **8.** Set the *Keep Alive Period* to **0**.
- 9. Enable *Force Codec Selection* and use PCMU.



10. Click **Save** and then **Reboot** to store the changes.

Figure 5-14. SIP Configuration

Cybe	erData v3	.1 Paging Server	7
SIP Settings		Nightringer Settings	
Enable SIP operation:		Enable Nightringer:	
Register with a SIP Server:	2	SIP Server: 10.0.0.253	
Use Cisco SRST:		Remote SIP Port: 5060	
Primary SIP Server: s	sip.ringcentral.com	Local SIP Port: 5061	
Primary SIP User ID:	8312234700*803291212011	Outbound Proxy:	
Primary SIP Auth ID: 8	803291212011	Outbound Proxy Port: 0	
Primary SIP Auth Password:		User ID: 241	
Destan CID Comments		Authenticate ID: 241	
Backup SIP Server 1:		Authenticate Password:	
Backup SIP User ID 1:		Re-registration Interval (in seconds): 360	
Backup SIP Auth ID 1:		Relay rings to multicast:	
Backup SIP Auth Password 1:		Multicast Address: 224.1.2.32	
Backup SIP Server 2:		Multicast Port: 2020	
Backup SIP User ID 2:			
Backup SIP Auth ID 2:		Call Disconnection	
Backup SIP Auth Password 2:			
		Terminate Call after delay: 0	
Remote SIP Port:	5060		
Local SIP Port:	5060	Codec Selection	
	sip10.ringcentral.com		
Outbound Proxy Port:	5090	Force Selected Codec: ✓ Codec: PCMU (G.711, u-law) ▼	
Disable rport Discovery:			
Buffer SIP Calls:			
Re-registration Interval (in seconds):			
Unregister on Boot:			
Keep Alive Period:)		



Autoprovisioning

If autoprovisioning the paging server, use the SIP Settings in the autoprovisioning template to register the paging extension with RingCentral.

An autoprovisioning template is provided in the respective firmware folder available on the **Downloads** tab of the product webpage here: <u>https://www.cyberdata.net/collections/sip/products/011146</u>

Be sure to use the autoprovisioning template for the firmware version running on the paging server. The firmware version can be verified on the <u>Home page of the web interface</u>.

Refer to the Operations Guide for instructions on autoprovisioning configuration.

Figure 5-15. <u>Autoprovisioning Template Example – SIP Settings</u>

C <sipsettings></sipsettings>
<enablesipoperation>Yes</enablesipoperation>
<sipserver>sip.ringcentral.com</sipserver>
<remotesipport>5060</remotesipport>
<localsipport>5060</localsipport>
<outboundproxy>sip10.ringcentral.com</outboundproxy>
<outboundproxyport>5090</outboundproxyport>
<sipuserid>18312234700*803291212011</sipuserid>
<sipauthid>803291212011</sipauthid>
<sipauthpassword>****</sipauthpassword>
<sipregistrationtimeout>30</sipregistrationtimeout>
<sipregisteronboot>Yes</sipregisteronboot>
<buffersipcalls>No</buffersipcalls>
<rtpport>10500</rtpport>
<jitterbuffer>50</jitterbuffer>
<calltimeout>0</calltimeout>
<useciscosrst>No</useciscosrst>
<disablerportdiscovery>No</disablerportdiscovery>
<natpingoptions>No</natpingoptions>
<keepalive>0</keepalive>
<defaultcodec>1</defaultcodec>
-
<polycomdefaultgroup>1</polycomdefaultgroup>
-
<pre>PagingGroupSettings></pre>
<bypassdtmf>Yes</bypassdtmf>
<sendpolycom>No</sendpolycom>
<paginggroup00addr>234.2.1.1</paginggroup00addr>
<paginggroup00port>2000</paginggroup00port>
<paginggroup00name>PagingGroup00</paginggroup00name>
<paginggroup00ttl>255</paginggroup00ttl>
<paginggroup00lineout>Yes</paginggroup00lineout>
<paginggroup00code></paginggroup00code>
<pre><paginggroup00playstoredmessage>No</paginggroup00playstoredmessage></pre>
<paginggroup00timestoplay>1</paginggroup00timestoplay>
<paginggroup00audiofile></paginggroup00audiofile>

Note: These example values are published only for reference. The SIPAuthPassword value should be the actual value from the <u>Assisted Generic IP Phone Provisioning</u> popup window.



Verify the Paging Extension is Registered

After the paging server has rebooted and initialized, refresh the <u>Home page of the web interface</u>. The device should show as [**Registered with SIP Server**] in green text on the bottom of the Home Page of the web interface; See <u>Figure 5-11</u>.

Additionally, the registration status may be verified with RingCentral through the admin portal. From the **Phones & Devices** menu, select **Paging Devices** and the Paging Device just created for the paging server. The status should show as "online" or a Green Checkmark in the **Status** column.

RingCentral			🕑 CyberD	ata 🗸 (831) 223-4700 Ext. 101	Admin Portal 🗸	Support Log	Out
Phone System Users	Analytics Call Log	Billing Tools ~			R	ి. 📞	IJ
Company Info	User Phones Comm	non Area Phones Paging Devices S	Shared Lines	Unassigned			
CH Phone Numbers	Search Paging Devices	Paging Devices Q Status ~					
Q Auto-Receptionist	i Delete						
_	Status	Name	~	Assigned Groups		Operation	
9 Group(s) 0 Other(s)		CyberData Paging Amp	CyberData Paging Amp CyberData Paging Group				
o carcito)		CyberData SIP Paging Server	Delete				
Phones & Devices	. 8	Paging Amp Nightringer	Delet				
	. 8	SIP IP66 Outdoor Horn				Delete	

Figure 5-16. Device Details – Status

Make a Test Call

Once the paging server has registered with RingCentral, any RingCentral phone may be used to dial the paging extension.

Refer to this <u>RingCentral Knowledge article 5925</u> for instructions on paging a group from an IP phone.



6.0 Configuration Procedure: Voice-Prompted Paging

When an installation requires more than one paging group the SIP Paging Server, can be provisioned as an IP phone associated with a user extension. Provisioning as an IP Phone allows the user to hear menu prompts and enter DTMF codes to select different multicast zones. Provisioning as an IP Phone does have a monthly reoccurring cost.

Provision the Paging Server's primary extension as an IP phone to enable the following features:

- Use of up to 100 Multicast Zones
- Security code protection for multicast zones

Add an IP Phone

This section describes the process of creating a user, provisioning an IP phone, and registering the primary extension that will be used for paging with RingCentral. First, a user must be created for the paging server.

1. Login to the RingCentral Admin Portal at https://service.ringcentral.com.

RingCentral	RingCentral
	Sign In
	(831) 223-4700
abre 20	Next
RingCentral	Or sign in with
Referral Program	G Google ⊖ Single Sign-on
Refer a new customer and earn valuable rewards.	New to RingCentral? Sign up here
Refer	

Figure 6-1. RingCentral Admin Portal Login



2. Select Users, and then press the Add User button.

Figure 6-2. Add User Button

RingCentral [*]			♥ CyberData ∨ (831) 223-47	00 Ext. 101 Admin Portal ~	Get Help Log Out
Phone System Users	Reports V Call Log Billing	Tools 🗸			Rº. E
(User list	Users With Extensions Unassig	ned Extensions			
a Roles	Search Users Q	Status ~	Roles ~	+ Add User ⊥ Dowr	Iload User List
	Department ~				
🙁 User groups		le 📿 Resend Invite	E Apply Templates		
A= Templates	Status Name ~	Number Ex	ct. Roles Department	Msg.	٥
	Available User2	94	15 Standard (Intern	0/0	Disable
	Cameron Device	(831) 272-0654 93	Standard (Intern	0/0 <u>R</u>	esend Invite Delete
	Cameron Nightr	(831) 272-0641 93	Standard (Intern	0 / 0 <u>R</u>	esend Invite Delete
	Cameron Snom	(831) 233-3994 93	32 Super Admin	<u>3/3</u>	Disable
	CyberData Cor	(303) 872-5806 10	1 Super Admin	<u>9/9</u>	
	Group User	94	3 Standard (Intern	<u>3/3</u>	Disable
	Interop Polyco	(831) 975-2610 10	04 Standard (Intern	<u>1/1</u>	Disable
	Interop Snom360	(831) 233-3992 10	3 Super Admin	<u>5/5</u>	
	Interop Strobe	(669) 900-4551 94	12 Standard (Intern	<u>1/1</u>	Disable
	Kenny phone 2	(831) 741-4265 93	Standard (Intern	2/2	Disable
	Kenny phone 3	(831) 272-0630 93	89 Standard (Intern	<u>6/6</u>	Disable



3. A popup window labeled Add User will appear. Select a location then press Next.

Figure 6-3. Add User Popup

	Add Users						
	1 Location	2 Add Users	3 Shipping Address	4 Confirmation			
Select a Location							
Domestic	national						
					Cancel	Next	

4. In the subsection **Add Users with Phones**, select the number of users, state, area code, and device.

Figure 6-4. Pick a Phone Number

Add Users								
	✓ Location	2 Add Users	3 Shipping Address	4 (Confirmation			
Add Users With Phones	Add Users Without Phones	3						
Account Status								
Your plan: 20 - 99 Users	Used: 25 Available:	0 Available	e for purchase: 74					
You can add multiple users	s at a time if they will all use the s	ame area code. <u>L</u>	earn More			_		
Number of Users	State	Area C	Code		Device			
1	Select	▼ Sele	ect	٣	Select a Device >	A	dd	
						Back	Next	



5. Next, select a phone type. Choose **Other Phones**, and then make sure **Existing Phone** is selected. Press **Select**.

Figure	6-5.	Select	Phone	Type

< Back	Add Users - Select a Device	
Select a Device		
Desktop Phones Other Phone	rs	
Existing Phone Price: FREE	RingCentral Phone app Price: FREE	
Existing Phone Select this option if you have your ow	n unlocked SIP compatible device you'd like to use.	× Purchase - \$0.00 Select

6. This will then lead to a six-step ordering process to set up a RingCentral Digital Line. Click the **Select** button to choose an **Existing Phone** and follow the steps in the ordering window to complete an order.



7. From the **Phones & Devices** menu, select **User Phones** and select the user phone designated for the paging server. Click **Setup and Provision**.

RingCentral [®]				S CyberData ∽ (83	31) 223-4700 Ext. 101	Admin Portal V Support Log Out
Phone System Users	Analytics	Call Log Billing Tools V				R .º. 🕻 E
Company Info	User Pho	ones Common Area Phones Pa	ging Devices SI	nared Lines Unass	signed	
Phone Numbers	Search U	Jser Phones Q Status	~ Dev	ce v		+ Add Device
Q Auto-Receptionist	Status	Device ~	Assigned	Phone Number	Serial No.	Operation
	0	Cameron Device	Cameron Device	(831) 272-0654	N/A	Setup & Provision
9 Group(s) 0 Other(s)	8	Cameron Nightringer	Cameron Nightri	(831) 272-0641	N/A	Setup & Provision
	8	Cameron Snom	Cameron Snom	(831) 233-3994	N/A	Setup & Provision
Phones & Devices	8	Christina Nightringer	Kenny phone 3	(831) 272-0630	N/A	Setup & Provision
	8	Christina Polycom/V/X300	Interop Polycom	(831) 975-2610	0004F289C3B8	
	8	CyberData Nightringer Existing Phone	CyberData Night	(831) 609-4948	N/A	Setup & Provision
	8	CyberData Paging Server	CyberData Pagin	(831) 610-4933	N/A	Setup & Provision

Figure 6-6. Setup and Provision

8. A popup window labeled Setup & Provisioning will appear. Select Other Phones and click Select.

Setup & Provisioning				
1 Select Device 2 Provisioning 3 Finish				
In addition to the devices RingCentral sells pre-provisioned, RingCentral supports assisted provisioning for additional models. If your model is not available via assisted provisioning, RingCentral may have documented how to manually configure it. Please see the office devices page for more information.				
Select your phone model to begin:				
Cisco / Linksys IP Devices Polycom IP Phones Yealink IP Phones Other Phones				
Existing Phone Select				
Cano	el			

Figure 6-7. Setup & Provisioning - Other Phones



9. A popup window labeled **Setup & Provisioning** will appear. This information will be used to register the device with RingCentral.

Figure 6-8. IP Phone Provisioning Information

Setup & Provisioning		
	✓ Select Device ✓ Provisioning 3 Finish	
	he RingCentral service, you will need to program it with the following information. n device to device, so please check with your device's manufacturer for specific instructions.	
Field	Value	
SIP Domain	sip.ringcentral.com:5060	
Outbound Proxy	SIP10.ringcentral.com:5090 ~	
User Name	18316104933	
Password		
Authorization ID	802872093010	
	Done	

Note: The Password has been obscured. These values are published only for reference.



SIP Fields Table

Use the following table to determine how the RingCentral SIP field values above correlate to the CyberData SIP field values.

Primary SIP Server field	From the IP Phone Provisioning Information popup: SIP Server
Primary SIP User ID field	From the IP Phone Provisioning Information popup: SIP User ID
Primary SIP Auth ID field	From the IP Phone Provisioning Information popup: Authenticate ID
Primary SIP Auth Password field	From the IP Phone Provisioning Information popup: Authenticate Password
Outbound Proxy field	From the IP Phone Provisioning Information popup: Outbound Proxy
Outbound Proxy Port field	From the IP Phone Provisioning Information popup: Outbound Proxy Port
Re-registration Interval (in seconds) field	30
Keep Alive Period field	0
Force Selected Codec checkbox	Yes
Codec dropdown	PCMU (G.711, u-law)

Table 6-1. CyberData Configuration Settings

Configure SIP Parameters

If configuring through the web interface, use the following steps to login to the web interface of the paging server and register the extension with RingCentral.

- 1. Click Launch Browser from the CyberData Discovery Utility or point a browser to the CyberData device's IP address to access the Home Page of the web interface.
- 2. Enter the web login credentials when prompted and click the Log In button.
- 3. On the Home Page, click **SIP** on the top toolbar of the screen to access the SIP tab.
- Enter the provisioning information from the <u>Assisted Generic IP Phone</u> <u>Provisioning</u> popup window. Use <u>Table 6-1</u> to enter RingCentral SIP values into the proper CyberData SIP fields.

Note: The Local SIP Port is set to 5060 on default and is used by the Paging Server as its source port for the paging extension configured on this page. CyberData Corporation 3 Justin Court, Monterey, CA 93940 www.cyberdata.net P 831.373.2601 | F 831.373.4193



- 5. Set the *Re-registration Interval (in seconds)* to **30 seconds**.
- **6.** Set the *Keep Alive Period* to **0**.
- 7. Enable *Force Codec Selection* and use **PCMU**.
- 8. Click Save and Reboot to store changes.

Figure 6-9. SIP Configuration

Cyb	erData	v3.1 Paging Server
SIP Settings Enable SIP operation: Register with a SIP Server: Use Cisco SRST: Primary SIP Server: Primary SIP Server: Primary SIP Auth ID: Primary SIP Auth Password: Backup SIP Server 1:	sip.ringcentral.com 18316104933 802872093010 	Nightringer SettingsEnable Nightringer:SIP Server:10.0.0.253Remote SIP Port:5060Local SIP Port:5061Outbound Proxy:Outbound Proxy Port:0User ID:241Authenticate ID:241Authenticate ID:241
Backup SIP User ID 1: Backup SIP Auth ID 1: Backup SIP Auth Password 1: Backup SIP Server 2:		Authenticate Password:••••••Re-registration Interval (in seconds):360Relay rings to multicast:••••••Multicast Address:224.1.2.32Multicast Port:2020
Backup SIP User ID 2: Backup SIP Auth ID 2: Backup SIP Auth Password 2: Remote SIP Port: Local SIP Port:	5060	Call Disconnection Terminate Call after delay: 0
Outbound Proxy: Outbound Proxy Port: Disable rport Discovery: Buffer SIP Calls: Re-registration Interval (in seconds)	sip20.ringcentral.com 5090	Force Selected Codec: ✓ Codec: PCMU (G.711, u-law) ▼
Unregister on Boot: Keep Alive Period: RTP Settings RTP Port (even): 10500	0	Save Reboot Toggle Help



Autoprovisioning

If autoprovisioning the Paging Server, use the SIP Settings in the autoprovisioning template to register the primary extension with RingCentral.





Note: These example values are published only for reference. The SIPAuthPassword value should be the actual value from the <u>Assisted Generic IP Phone Provisioning</u> popup window.



Verify the Paging Extension Is Registered

After the paging server has rebooted and initialized to store changes, refresh the Home page of the web interface. The device should show as **[Registered with SIP Server]** in green text on the bottom of the Home Page of the web interface.

Additionally, the registration status may be verified with RingCentral through the Admin Portal. From the **Phones & Devices** menu, select **User Phones** and the IP Phone just created for the paging server. The status should show as "online" in the **Phone Details**.

RingCentral				⊘ CyberData ∨ (83	1) 223-4700 Ext. 101	Admin Portal V Support Log Out
Phone System Users	Analytics	Call Log Billing Tools ~				R .º. 🕻 🗉
Company Info	User Pho	ones Common Area Phones P	aging Devices	Shared Lines Unass	gned	
Phone Numbers	Search U	Jser Phones Q Status	~ D	levice ~		+ Add Device
Q Auto-Receptionist	Status	Device ~	Assigned	Phone Number	Serial No.	Operation
	8	Cameron Device	Cameron Device	(831) 272-0654	N/A	Setup & Provision
9 Group(s) 0 Other(s)	8	Cameron Nightringer	Cameron Nightri	(831) 272-0641	N/A	Setup & Provision
	8	Cameron Snom	Cameron Snom	(831) 233-3994	N/A	Setup & Provision
Phones & Devices	8	Christina Nightringer	Kenny phone 3	(831) 272-0630	N/A	Setup & Provision
	8	Christina Polycom/V/X300	Interop Polycom	(831) 975-2610	0004F289C3B8	
	8	CyberData Nightringer Existing Phone	CyberData Night	(831) 609-4948	N/A	Setup & Provision
	۲	<u>CyberData Paging Server</u>	CyberData Pagir	n (831) 610-4933	N/A	Setup & Provision

Figure 6-11. Phone Details – Status

Make a Test Call

Once the paging server has registered with RingCentral and the appropriate Device settings for the installation have been configured, any RingCentral phone may be used to dial the extension.



7.0 Configuration Procedure: Nightringer

What is a Nightringer?

The CyberData SIP Paging Server offers a secondary SIP extension called **Nightringer** in addition to the primary extension used for paging.

The Nightringer plays a customizable ring tone when an incoming call is detected. The Nightringer extension can be added to ring groups for simultaneous ringing. When added to a ring group, the Nightringer will ring until a ring group member picks up the call. The Nightringer stops ringing when the call is answered by a ring group member or when the caller disconnects before a ring group member picks up the call. The Nightringer extension cannot answer a call.

Provisioning Nightringer with RingCentral

Provisioning a Nightringer extension with RingCentral requires creating a user and provisioning an IP phone in the same manner as the primary extension in <u>Section 6.0 "Configuration</u> <u>Procedure: Voice Prompted Paging.</u>"

It is important to note the Primary 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 Primary Extension (and vice versa).

To be clear, when integrating with RingCentral <u>the Nightringer extension must be provisioned as</u> <u>an IP phone</u> rather than a Paging Device which will allow the Nightringer to ring.

If the Nightringer is provisioned and registered as a Paging Device, the Nightringer will only ring for 2 seconds before the call is cancelled by the RingCentral server. Thus, it is necessary to provision the Nightringer as an IP phone for full functionality. Please consult with RingCentral for costs associated with IP phone provisioning for the account.



Add an IP Phone

To provision the Paging Server's Nightringer extension, add a RingCentral Existing Phone through the RingCentral Admin Portal.

First, a user must be created for use by the Nightringer.

1. From the **[n]** Users menu, click the **Add** button.

RingCentral '					🖉 CyberData 🗸	(831) 223-470	0 Ext. 101 Adm	in Portal 🗸 Get He	p Log Out
Phone System Users	Reports ~	Call Log Billing	Tools v					°. 9	5 ا
(User list	Users With Exte	ensions Unassig	ned Extensions						
Roles	Search Users Department	م •	Status	~ Rol	es v		+ Add User	↓ Download User Lis	t
User groups	🕆 Delete	Enable × Disab	le 🦪 Resend II	nvite 🛛	Apply Templates				
A= Templates	Status	Name ~	Number	Ext.	Roles	Department	Msg.		0
	. 🖉	Available User2		945	Standard (Intern		0/0		<u>Disable</u>
	•	Cameron Device	(831) 272-0654	934	Standard (Intern		0/0	Resend Invite	Delete
	•	Cameron Nightr	(831) 272-0641	935	Standard (Intern		0/0	Resend Invite	Delete
		Cameron Snom	(831) 233-3994	932	Super Admin		3/3		<u>Disable</u>
		CyberData Cor	(303) 872-5806	101	Super Admin		<u>9/9</u>		

Figure 7-1. Add User Button



2. A popup window labeled Add User will appear. Choose the user location then press Next.

	Add Users							
	1 Location	2 Add Users	3 Shipping Address	4 Confirmation				
Select a Location								
 Domestic International 	ational							
					Cancel	Next		

Figure 7-2. Add User Location



3. In the subsection **Add Users with Phones**, select the number of users, state, area code, and device.

Add Users									
	✓ Location	2 Add Users 3 Shipping A	ddress 4 Confirmation						
Add Users With Phones	Add Users Without Phones								
Account Status	Account Status								
Your plan: 20 - 99 Users	Used: 25 Available:	0 Available for purchase: 7	74						
You can add multiple users	at a time if they will all use the s	ame area code. <u>Learn More</u>		_					
Number of Users	State	Area Code	Device						
1	Select	▼ Select	▼ Select a Device	> Add					
				Back Next					

Figure 7-3. Add User Phone Number



4. From the Select a Device menu pick **Other Phones**. Then select **Existing Phone**. Press Select to confirm the selection.

Figure 7-4. Select Phone Type

< Back	Add Users - Select a Device	
Select a Device		
Desktop Phones Other Phones		
Price: FREE	RingCentral Phone app Price: FREE	
Existing Phone Select this option if you have your own t	unlocked SIP compatible device you'd like to use.	Purchase - \$0.00 ×



5. From the **Phones & Devices** menu, select **User Phones** and the select the user phone created for the Nightringer. Click **Setup and Provision**.

RingCentral				🕑 Cyb	erData ∽	(831) 223-4700 Ext. 101	Admin Portal 🗸	Get Help	Log Out
Phone System Users	Reports ~	Call Log Billing Too	ls 🗸				6	<u>ı</u> .°. (Ţ
Company Info	User Pho	Common Area Phones	Paging Devices	Shared L	ines L	Jnassigned			
Phone Numbers	Search L	Jser Phones Q Status	~	Device	~		+	Add Device	:
Q Auto-Receptionist	Status	Device	 Assigned 	Pho	ne Number	Serial No.			
	0	Cameron Device	Cameron [Device (831) 272-0654	N/A		Setup & Provis	<u>sion</u>
8 Group(s) 0 Other(s)	8	Cameron Nightringer	Cameron I	Nightri (831) 272-0641	N/A		Setup & Provis	sion
	8	Cameron Snom	Cameron S	Snom (831) 233-3994	N/A		Setup & Provis	sion
Phones & Devices	8	Christina Nightringer	Kenny pho	ine 3 (831) 272-0630	N/A		Setup & Provis	sion
	8	Christina Polycom/V/X300	Interop Po	lycom (831) 975-2610	0004F289C3B8			
	8	CyberData Nightringer Existing Phon	e CyberData	Night (831) 609-4948	N/A	(Setup & Provis	sion

Figure 7-5. Setup and Provision



6. A popup window labeled Assisted provisioning – Step 1 will appear. Select Other Phones and click Next.

Setup & Provisioning						
1 Select Device 2 Provisioning 3 Finish						
In addition to the devices RingCentral sells pre-provisioned, RingCentral supports assisted provisioning for additional models. If your model is not available via assisted provisioning, RingCentral may have documented how to manually configure it. Please see the <u>office devices</u> page for more information. Select your phone model to begin: Cisco / Linksys IP Devices Polycom IP Phones Yealink IP Phones Other Phones						
Existing Phone Select						
Cance	اد ا					



7. A popup window labeled **Assisted Generic IP Phone/Adaptor Provisioning** will appear. The provisioning information will be used to register the Paging Server's Nightringer extension with RingCentral.

Setup & Provisioning							
	Select Device						
	the RingCentral service, you will need to program it with the following information.						
Field	Value						
SIP Domain	sip.ringcentral.com:5060						
Outbound Proxy	SIP10.ringcentral.com:5090 ~						
User Name	18316094948						
Password							
Authorization ID	802872227010						
	D	one					

Figure 7-7. IP Phone Provisioning Information

Note: The Password has been obscured. These values are published only for reference.



SIP Fields Table

Use the following table to determine how the RingCentral SIP field values above correlate to the CyberData SIP field values.

Primary SIP Server field	From the Paging Device Provisioning Information popup: SIP Server
Primary SIP User ID field	From the Paging Device Provisioning Information popup: SIP User ID
Primary SIP Auth ID field	From the Paging Device Provisioning Information popup: Authenticate ID
Primary SIP Auth Password field	From the Paging Device Provisioning Information popup: Authenticate Password
Outbound Proxy field	From the Paging Device Provisioning Information popup: Outbound Proxy
Outbound Proxy Port field	From the Paging Device Provisioning Information popup: Outbound Proxy Port
Re-registration Interval (in seconds) field	30
Keep Alive Period field	0
Force Selected Codec checkbox	Yes
Codec dropdown	PCMU (G.711, u-law)

Table 7-1 CyberData Configuration Settings

Configure Nightringer SIP Parameters

If configuring the Nightringer extension through the web interface, use the following steps to register Nightringer with RingCentral.

1. From the Home page of the web interface, click **SIP** on the top toolbar.



Figure 7-8.	Home Page	of the Web	Interface – N	Nightringer Button

Home	Device	Network	SIP	PGROUPS	Schedules	Fault	Audiofiles	Events	Autoprov	Firmware
CyberData v3.1 Paging Server										
Current S	tatus			Admin S	ettings		Im	port Setti	ings	
Serial Number: Mac Address: Firmware Versio IP Addressing: IP Address: Subnet Mask: Default Gateway DNS Server 1: DNS Server 2: SIP Mode:	DHCP 10.10.1. 255.0.0	03:30:1e 194 0		Username: Password: Confirm Passv))	Ex	port Config		
SIP Mode: Event Reporting Nightringer: Primary SIP Ser Backup Server 1 Backup Server 1 Nightringer Serv	: Disabled Disabled ver: Not regis 1: Not regis 2: Not regis	s tered stered stered								

2. Enter the provisioning information from the <u>Nightringer's Assisted Generic IP</u> <u>Phone/Adaptor Provisioning</u> popup.

Note: The Local SIP Port is set to 5061 on default and is used by the Paging Server as its source port for the Nightringer extension configured on this page.

- 3. Set the *Re-registration Interval (in seconds)* to 30 seconds.
- 4. Set the *Keep Alive Period* to **0**.
- 5. Enable Force Codec Selection and select PCMU.
- 6. Click Save and Reboot to store changes.



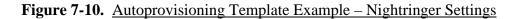
SIP PGROUPS Schedules Audiofiles Home Device Network Fault Events Autoprov Firmware CyberData v3.1 Paging Server **SIP Settings Nightringer Settings** Enable SIP operation: Enable Nightringer: . Register with a SIP Server: SIP Server: sip.ringcentral.com Use Cisco SRST: Remote SIP Port: 5060 Primary SIP Server: sip.ringcentral.com Local SIP Port: 5061 Primary SIP User ID: 18312234700*803291212011 Outbound Proxy: sip10.ringcentral.com Primary SIP Auth ID: 803291212011 Outbound Proxy Port: 5090 Primary SIP Auth Password: User ID: 18312333993 Authenticate ID: 17422862010 Backup SIP Server 1: Authenticate Password: Backup SIP User ID 1: Re-registration Interval (in seconds): 30 Backup SIP Auth ID 1: Relay rings to multicast: Backup SIP Auth Password 1: Multicast Address: 224.1.2.32 Multicast Port: 2020 Backup SIP Server 2: Backup SIP User ID 2: Backup SIP Auth ID 2: **Call Disconnection** Backup SIP Auth Password 2: Terminate Call after delay: 0 Remote SIP Port: 5060 Local SIP Port: 5060 Codec Selection Outbound Proxy: sip10.ringcentral.com Force Selected Codec: 🕑 Outbound Proxy Port: 5090 PCMU (G.711, u-law) ▼ Codec: Disable rport Discovery: Buffer SIP Calls: Re-registration Interval (in seconds): 30 Unregister on Boot Keep Alive Period: 0 **RTP Settings** Toggle Help Reboot RTP Port (even): 10500 Jitter Buffer: 50

Figure 7-9. <u>Nightringer Configuration Page of the Web Interface</u>



Autoprovisioning

If autoprovisioning the Paging Server, use the Nightringer Settings in the autoprovisioning template to register the Nightringer with RingCentral.



-NightringerSettings>
<pre><enablenightringer>Yes</enablenightringer></pre>
<nightringersipserver>sip.ringcentral.com</nightringersipserver>
<nightringerremoteport>5060</nightringerremoteport>
<nightringerlocalport>5061</nightringerlocalport>
<pre><nightringeroutboundproxy>sip10.ringcentral.com</nightringeroutboundproxy></pre>
<pre><nightringeroutboundproxyport>5090</nightringeroutboundproxyport></pre>
<pre><nightringeruserid>18312333993</nightringeruserid></pre>
<nightringerauthid>17422862010</nightringerauthid>
<nightringerauthpassword>*****</nightringerauthpassword>
<pre><nightringerregistrationtimeout>30</nightringerregistrationtimeout></pre>
<pre><nightringerenablemulticast>No</nightringerenablemulticast></pre>
<pre><nightringermulticastaddress>224.1.2.32</nightringermulticastaddress></pre>
<pre><nightringermulticastport>2020</nightringermulticastport></pre>
-

Note: These example values are published only for reference. The "NightringerAuthPassword" value should be the actual value from the <u>Nightringer's Assisted Generic IP Phone/Adaptor</u> <u>*Provisioning*</u> popup.



Verify the Nightringer is Registered

After the paging server has rebooted and initialized, refresh the <u>Home page of the web interface</u>. The device should show as [**Registered with SIP Server**] in green text on the bottom of the Home Page of the web interface as well as at the top of the Nightringer Configuration page next to *Enable Nightringer*. See <u>Figure 6-2</u> and <u>Figure 6-3</u>.

Additionally, the registration status may be verified with RingCentral through the admin portal. From the **Phones & Devices** menu, select **User Phones** and the IP Phone just created for the Nightringer. The status should show as "online" in the **Phone Details**.

RingCentral [®]				♥ CyberData ∨ (8	31) 223-4700 Ext. 101	Admin Portal 🗸	Support	Log Out
Phone System Users	Analytics	Call Log Billing Tools V				R	.ô. 📞	J
Company Info	User Pho	ones Common Area Phones Pa	iging Devices SI	nared Lines Unas	signed			
V Phone Numbers	Search U	Jser Phones Q Status	~ Devi	ce v		+	Add Device	:
Q Auto-Receptionist	Status ^	Device	Assigned	Phone Number	Serial No.		Opera	tion
	•	CyberData Paging Server NightRinger	Paging Server	(831) 233-3993	N/A		Setup & Provis	<u>sion</u>
9 Group(s) 0 Other(s)	0	Existing Phone	Interop Snom360	(831) 233-3992	N/A		Setup & Provis	<u>sion</u>
	8	Cameron Device	Cameron Device	(831) 272-0654	N/A		Setup & Provis	sion
Phones & Devices	8	Cameron Nightringer	Cameron Nightri	(831) 272-0641	N/A		Setup & Provis	sion

Figure 7-11. Nightringer Phone Details – Status

Make a Test Call

Once the device has registered with RingCentral, any phone may be used to dial the Nightringer extension.



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 RingCentral Cloud PBX solution may render this document obsolete. We welcome and encourage documentation feedback to ensure continued applicability.