



Wildix Configuration Guide: SIP Paging Server

Document Part # 931892C

CyberData Corporation

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Revision Information

- 10/7/2021 Initial Release
- 10/14/2021 Updated extension creation process.
- 11/10/2021 Updated screenshots and extension requirements.



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1.0 Setup Diagram

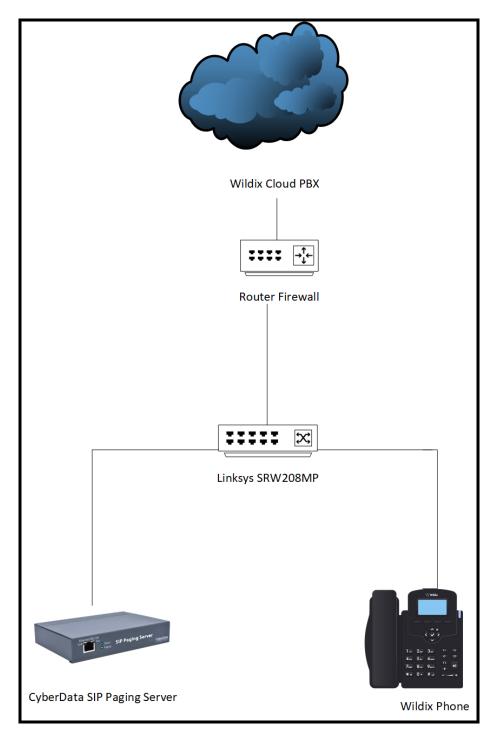


Figure 1-1: Interoperability Test Infrastructure



2.0 Test Setup Equipment

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

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

EQUIPMENT	MODEL or PART NUMBER	FIRMWARE VERSION
CYBERDATA SIP PAGING SERVER	011146	20.0.0
LINKSYS SWITCH	SRW208MP	



3.0 Before You Start

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

Network Advisories

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

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

- UDP 5060 (SIP)
- UDP 10500 (RTP)

The paging server will need to traverse the public internet in order to operate with Wildix in the cloud.

The paging server's paging extension uses SIP port 5060 to receive SIP messages. The paging extension will send SIP messages to port 5060, the port used by Wildix's SIP Server.

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

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

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

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 button's product webpage:

CyberData SIP Call Button (011146)

https://files.cyberdata.net/assets/011146/011146_931803A_SIP_Paging_Server_Operations_Gui de.pdf



4.0 Configuration Procedure: Extension Creation

Note: Wildix requires a Wildix UC-Basic (simple intercom usage or Vision & Super Vision user) or Wildix UC-Essential (users who want to manage the intercom from Collaboration) to use CyberData products on the platform.

1. Log into Wildix.

Welcom to Wildix Collabo	
Login	
Password	Ì
Remember me	Login
	Login with G

Figure 4-1: Log into Wildix



2. On the Users Menu page press the + button to add a new extension.

se	rs	Gro	ups Phonebooks									Q	Search	
			Full Name	Login	Extension	Fax	Office	Email	Mobile	Dialplan	Fax dial	Group	Department	License type
6			admin	admin						internalc	Internalc	Admin		
6			Rob		201		+16145552123			users	users	New		Premium
L			Todd		202		+16145552122			users	users	Old		Premium
6		ZD	Paul		203		+16144841530			users	users	Admin		Premium
L			Cyberdata		300					users	users	Admin		Premium
L			Yealink Phone		204					users	users	Default		Essential
L			CyberData Nightringer		301					users	users	Default		Essential

Figure 4-2: Users Menu

3. A pop-up to create the extension will appear.

Figure 4-3:	Extension	creation

Add		Х
	User 🗸	
Full Name		
Login		
Extension		
Fax		
Office		
Email		
Mobile		
Dialplan	users (Internal dialplan)	
Fax dialplan	users (Internal dialplan)	
Language	En-us ∽	
Group	Default 🗸	
Department		
License type	Essential ~	
		Ok Cancel



- 4. Make sure the drop-down menu has User selected.
- 5. Set the full name to the location of the paging server.
- 6. Set the **Extension Number** desired for the device.

Note: Other values can be set, but for the purposes of this guide all other fields are left blank.

Figure 4-4:	Filled	Extension	Po	pu	р

Edit		Х
	User 🗸	
Full Name	CyberData SIP Paging Server	
Login		
Extension	300	
Fax		
Office		
Email		
Mobile		
Dialplan	users (Internal dialplan)	
Fax dialplan	users (Internal dialplan)	
Language	En-us ✓	
Group	Admin 🗸	
Department		
License type	Premium ~	
		Ok Cancel

- 7. Press **Ok** to save the extension.
- **8.** After creating the extension, select it out of the list.



Figure 4-5: Extension Created

Use	ers	Gro	ups Phonebooks									Q	Search	
			Full Name	Login	Extension	Fax	Office	Email	Mobile	Dialplan	Fax dial	Group	Department	License typ
-	۲		admin	admin						internalc	internalc	Admin		
-	۲		Rob		201		+16145552123			users	users	New		Premium
1			Todd		202		+16145552122			users	users	Old		Premium
4	٠	ZD	Paul		203		+16144841530			users	users	Admin		Premium
1	۲		CyberData SIP Paging Server	T.	300					users	users	Admin	ſ	Premium
L			Yealink Phone		204	1				users	users	Default		Essential
1	0		CyberData Nightringer		301					users	users	Default		Essential

- 9. After selecting the extension, press Set Passwords.
- 10. Click on the Generate button for SIP/VoIP to create a password.

Figure 4-6: <u>Set Passwords Popup</u>

Set passwords			Х
WEB		Generate	
SIP/VoIP	•••••	Generate Show	

11. Click the show button and copy the auto-generated password which will be required in the next section.



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	Wildix Provisioning Pop-up
Primary SIP Server	SIP Domain
Primary SIP User ID	Extension Number
Primary SIP Auth ID	Extension Number
Primary SIP Auth Password	Password

Table 5-1: <u>Setting Name correlation</u>

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.

Discovery Utilit	ata		− □ × VoIP Discovery Utility			
IP Address	DHCP	MAC Address	Serial Number	Device Name		
192.168.1.31 Er	nabled	00:20:f7:04:80:03	146200123	Paging Server		
Discover Op	en Browser			Quit		

Figure 5-1: CyberData Discovery Utility

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

Username: admin Password: admin



Figure 5-2: Home Tab

Home Device	Network SIP	PGROUPS SSL	Schedules	Fault	Audiofiles	Events	Autoprov	Firmware
	Cvbe	erData	Pagi	ina	Se	rve	r	
Current Statu	-	Admin Setti	-			ort Settin		
Serial Number: Mac Address: Firmware Version: Partition 2: Partition 3:	146200123 00:20:f7:04:80:03 v20.0.0 v20.0.0 v20.0.0 v20.0.0	Username:	admin		Choose	File No file cl	1000	
Booting From: Boot From Other Partit	DHCP	Save Reboot	Toggle Help			Config	igs	
IP Address: Subnet Mask: Default Gateway: DNS Server 1: DNS Server 2:	192.168.1.31 255.255.255.0 192.168.1.1 192.168.1.1							
SIP Mode: Event Reporting: Nightringer:	Enabled Disabled Disabled							
Primary SIP Server: Backup Server 1: Backup Server 2: Nightringer Server:	Not registered Not registered Not registered Not registered							

3. Navigate to the SIP tab.



Figure 5-4: SIP Tab

SIP Settings		Nightringer Settings	
Enable SIP operation:		SIP Server:	
Register with a SIP Server:		SIP User ID:	
Buffer SIP Calls:	•	SIP Auth ID:	
Primary SIP Server:	wildixstudent9.wildixin.com	SIP Auth Password:	
Primary SIP User ID:	300	Re-registration Interval (in seconds):	360
Primary SIP Auth ID:	300	Relay rings to multicast:	
Primary SIP Auth Password:		Multicast Address:	224.1.2.32
Re-registration Interval (in seconds)	: 360	Multicast Port:	2020
Backup SIP Server 1:			
Backup SIP User ID:		Call Disconnection	
Backup SIP Auth ID:		Translands Call affine data	
Backup SIP Auth Password:		Terminate Call after delay: 0	
Re-registration Interval (in seconds):	360		
		Audio Codec Selectio	n
Backup SIP Server 2:		Codec: Auto Select	
Backup SIP User ID:		Codec. Auto Select	
Backup SIP Auth ID:			
Backup SIP Auth Password:		RTP Settings	
Re-registration Interval (in seconds):	: 360	RTP Port (even): 10500	1
	[mail.com]	Asymmetric RTP:	-
Remote SIP Port:	5060	Jitter Buffer: 50	
Local SIP Port:	5060	RTP Encryption (SRTP): Disabled	-
SIP Transport Protocol:	UDP -		
TLS Version:		Save Reboot Toggle Help	
Verify Server Certificate:		Save Reboot Hoggle Holp	
	<u>.</u>		
Outbound Proxy:			
Outbound Proxy Port:	0		
Use Cisco SRST:			
Disable rport Discovery:	0		
Unregister on Boot:	Ö		
Keep Alive Period:	10000		

- 4. Set the **Primary SIP Server** to the FQDN of the Wildix Server.
- 5. Set the **Primary SIP User ID** to the extension number.
- 6. Set the **Primary SIP Auth ID** to the extension number.
- 7. Set the **Primary SIP Auth Password** to the auto-generated password from the previous section.
- 8. Set the Keep Alive Period to 0.
- **9.** Save.
- 10. Reboot.

Once the unit reboots it should be registered with Wildix.



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

Home	Device	Network	SIP	PGROUPS	SSL	Schedules	Fault	Audiofiles	Events	Autoprov	Firmware
		Су	be	rDa	ta	Pag	ing	Se	rve	r	
Current Serial Numbe Mac Address: Firmware Ver: Partition 2: Partition 3: Booting From	r: sion:	146200123 00:20:f7:04:80 v20.0.0 v20.0.0 v20.0.0 partition 2):03	Admir Username Password Confirm P	:	admin			ort Settir		
0	other Partition j: vay:	DHCP 192.168.1.31 255.255.255.0 192.168.1.1 192.168.1.1)	Save	Reboot	Toggle Help			Config	ngs	
SIP Mode: Event Reporti Nightringer: Primary SIP S Backup Serve Backup Serve Nightringer S	ng: erver: er 1: er 2:	Enabled Disabled Disabled Registered Not registered Not registered Not registered									



6.0 Configuration Procedure: Setting up the Nightringer 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	Wildix Provisioning Pop-up
Primary SIP Server	SIP Domain
Primary SIP User ID	Extension Number
Primary SIP Auth ID	Extension Number
Primary SIP Auth Password	Password

Table 6-1: Setting Na	ame correlation
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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.

Discovery Utility	ata			Discovery
IP Address	DHCP	MAC Address	Serial Number	Device Name
192.168.1.31 En	abled	00:20:f7:04:80:03	146200123	Paging Server
Discover Ope	n Browser			Quit

Figure 6-1: CyberData Discovery Utility

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

Username: admin Password: admin



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Figure 6-2: Home Tab

	Cybe	rData Pagi	ng Server	
	Cync	i Duta i ugi		
Current Status		Admin Settings	Import Settings	
Serial Number:	146200123	Username: admin	Choose File No file chosen	
Mac Address: Firmware Version:	00:20:17:04:80:03 v20.0.0	Password: ·····		
Partition 2:	v20.0.0	Confirm Password:	Import Config	
Partition 3:	v20.0.0			
Booting From:	partition 2			
Boot From Other Partition		Save Reboot Toggle Help	Export Settings	
			Export Config	
IP Addressing: IP Address:	DHCP 192.168.1.31			
Subnet Mask:	255.255.255.0			
Default Gateway:	192.168.1.1			
DNS Server 1:	192.168.1.1			
DNS Server 2:				
SIP Mode:	Enabled			
Event Reporting:	Disabled			
Nightringer:	Disabled			
Primary SIP Server:	Not registered			
Backup Server 1:	Not registered			
Backup Server 2:	Not registered			

3. Navigate to the SIP Tab.



Figure 6-4: <u>SIP Tab</u>

SIP Settings		Nightringer Settings	
Enable SIP operation: Register with a SIP Server: Buffer SIP Calls: Primary SIP Server: Primary SIP User ID: Primary SIP Auth ID: Primary SIP Auth Password: Re-registration Interval (in seconds)	vildixstudent9 wildixin.com 300 300 360	SIP Server: SIP User ID: SIP Auth ID: SIP Auth Password: Re-registration Interval (in seconds): Relay rings to multicast: Multicast Address: Multicast Port:	wildixstudent9.wildixin.com 301 301 360 224.1.2.32 2020
Backup SIP Server 1: Backup SIP User ID: Backup SIP Auth ID: Backup SIP Auth Password: Re-registration Interval (in seconds)	360	Call Disconnection	
Re-registration interval (in seconds) Backup SIP Server 2: Backup SIP Auth ID: Backup SIP Auth Password: Re-registration Interval (in seconds) Remote SIP Port:		Audio Codec Selectio codec: Auto Select RTP Settings RTP Port (even): 10500 Asymmetric RTP:	n
Local SIP Port: SIP Transport Protocol: TLS Version: Verify Server Certificate:	5060 UDP 🗸	Jitter Buffer: 50 RTP Encryption (SRTP); Disabled Save Reboot Toggle Help	
Outbound Proxy: Outbound Proxy Port: Use Cisco SRST: Disable rport Discovery: Unregister on Boot: Keep Alive Period:	0		

- 4. Set the SIP Server to the FQDN of the Wildix Server.
- 5. Set the SIP User ID to the extension number.
- 6. Set the SIP Auth ID to the extension number.
- 7. Set the SIP Auth Password to the auto-generated password from the previous section.
- 8. Set the Keep Alive Period to 0.
- **9.** Save.
- 10. Reboot.

Once the unit reboots it should be registered with Wildix.



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