

RING CENTRAL CONFIGURATION GUIDE: CyberData Devices

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Revision Information

- Revision 932080A: Initial Release – January 2026
 - Combines all previous guides into one, suitable for all products.

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1.0 Before You Start

This configuration guide documents the integration process of all CyberData devices.

Network Advisories

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

- UDP 5060, 5090 (SIP)
- TCP 5060, 5096 (SIP)
- UDP 10500 (RTP)

The device(s) will need to traverse the public internet to operate with RingCentral.

Both of the device's extensions use SIP port 5060 to receive SIP messages. Both extensions will send SIP messages to port 5090, the port used by RingCentral's Outbound Proxy.

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

Alternatively, SIP ports 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 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.*

2.0 Configuration Procedure:

RingCentral has two different extension types for their platform, 'Paging Device' and traditional paid extensions. Both extensions apply to CyberData devices, although certain devices must use a paid extension. Paging Devices are suitable for most products that do not require two-way audio. Any device that requires two-way audio, such as an Intercom, would require a paid extension.

2.1 Paging Device Extension

Paging Device extensions are special extensions created specifically for paging centric devices such as speakers or horns. These extensions come at no cost but are limited to a total of 25 per account as well as some specific functionality limitations. These limitations are, no two-way audio and no DTMF pass through.

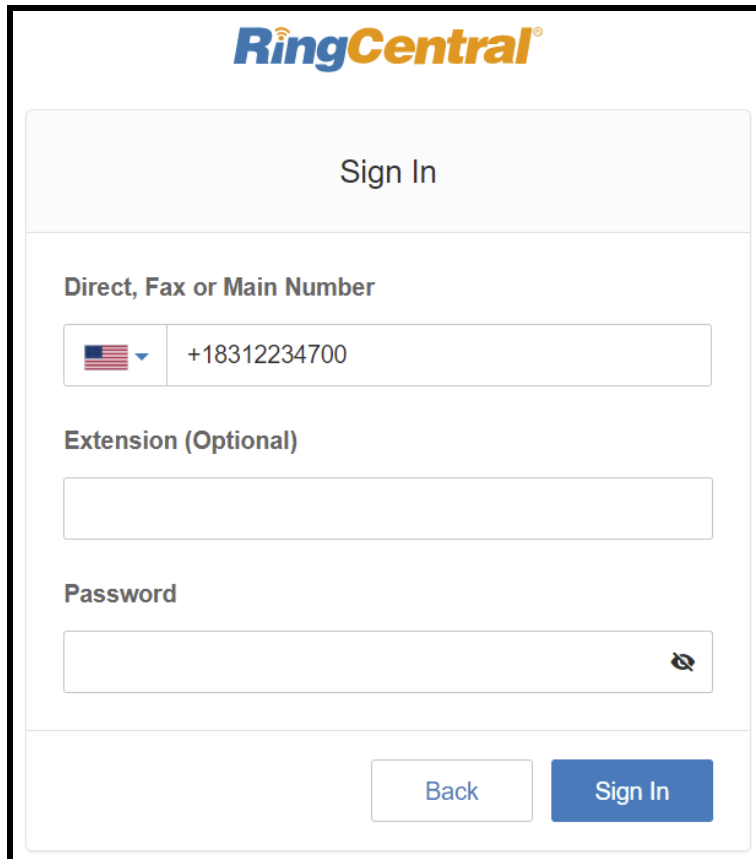
Add a Paging Extension

This section describes the process of creating a user, provisioning a paging device, and registering the paging extension that will be used for paging with RingCentral.

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

1. Login to the RingCentral Admin Portal.

Figure 2-1: RingCentral Admin Portal Login



The image shows the RingCentral Admin Portal login interface. At the top is the RingCentral logo. Below it is a 'Sign In' header. The form contains three input fields: 'Direct, Fax or Main Number' with a country code dropdown (showing the US flag) and a text field containing '+18312234700'; 'Extension (Optional)' with an empty text field; and 'Password' with an empty text field and a toggle icon. At the bottom are 'Back' and 'Sign In' buttons.

RingCentral®

Sign In

Direct, Fax or Main Number

 +18312234700

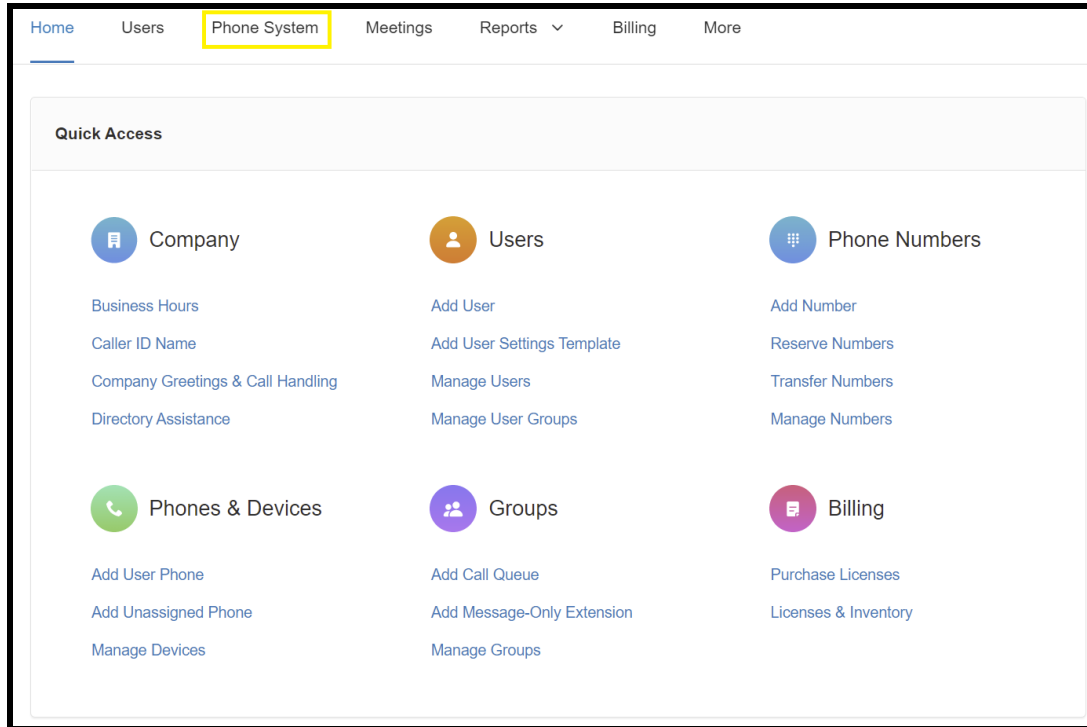
Extension (Optional)

Password

Back Sign In

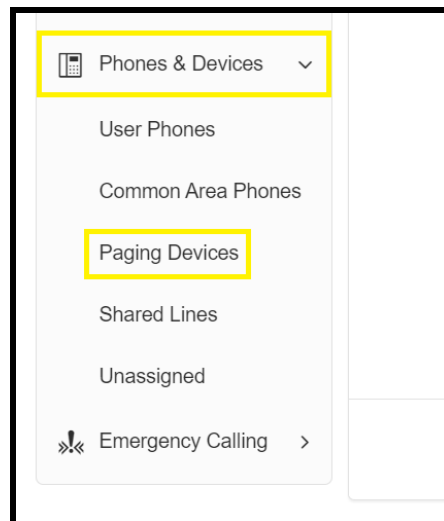
2. From the login page select **Phone System**.

Figure 2-2: Phone System



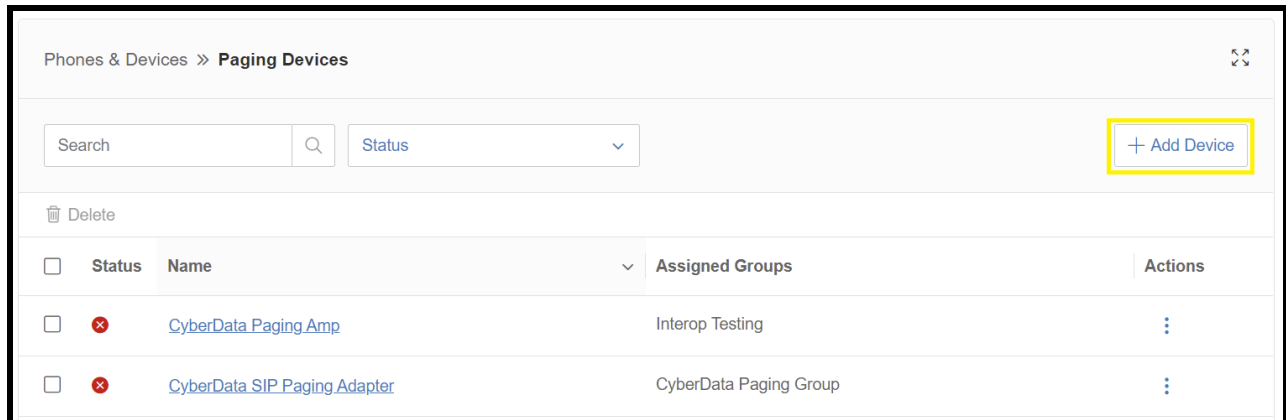
3. From the Phone System page select **Phones & Devices** and then **Paging Devices**.

Figure 2-3: Phones & Devices → Paging devices



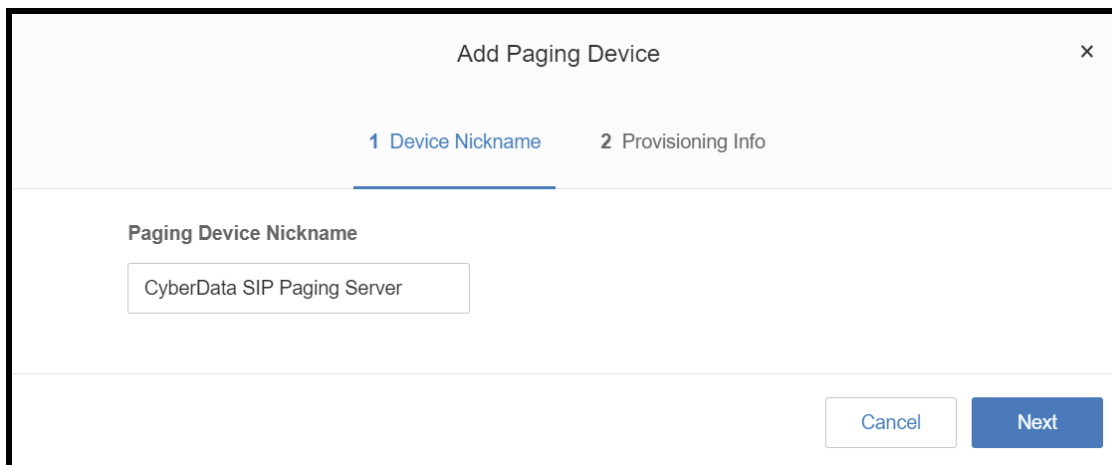
4. From the Paging Device page press **Add Device** to make a new paging device.

Figure 2-4: Add Device



5. A pop-up will appear that allows the Paging Device to be named.

Figure 2-5: Name Paging Device



6. After naming the device press **Next**.

7. The pop-up will now display configuration information to set up the CyberData device. Make sure to select an Outbound Proxy in your area.

Figure 2-6: Configuration details

CyberData SIP-enabled Speaker - Provisioning Instructions

Provisioning Information

Copy

Paging devices need to be programmed with the information given below to make them fully functional when assigned to paging group. Configuration for each device may vary, please check with your device's manufacturer for specific instructions.

Step 1: Will you be using secure voice transport on this device?

☒ Yes - The device must support Transport Protocol version TLS 1.2 [Learn more](#)

☐ No

Step 2: Set TLS on your device's Transport Protocol

Step 3: Enable Offer and Answer on the device's SRTP (Secure Real-Time Transport Protocol)

Step 4: Configure SIP information

Field	Value
SIP Domain	sip.ringcentral.com:5060
Remote SIP port	5060
Local SIP port	5060
Outbound Proxy	sip12.ringcentral.com:5096
Outbound Proxy Port	5096
User Name	18312234700*804821150011
Password	
Authorization ID	804821150011

OK

Note: For the purposes of this document the password has been obscured.

Configure SIP Parameters

The table below is a mapping of settings from the RingCentral configuration pop-up to the CyberData device's settings.

Table 2-1: CyberData Configuration Settings

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	Yes
Codec dropdown	PCMU (G.711, u-law)
SIP Transport Protocol	TLS
TLS Version	1.2 only (recommended)
SRTP	Enabled or Mandatory

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.

***Note:** CyberData devices require an HTTPS connection, if a redirect does not occur input https:// before the IP address of the device.*

2. Enter the default credentials when prompted and click the **Login** button.

Username: admin

Password: admin

Figure 2-7: Web Interface Login

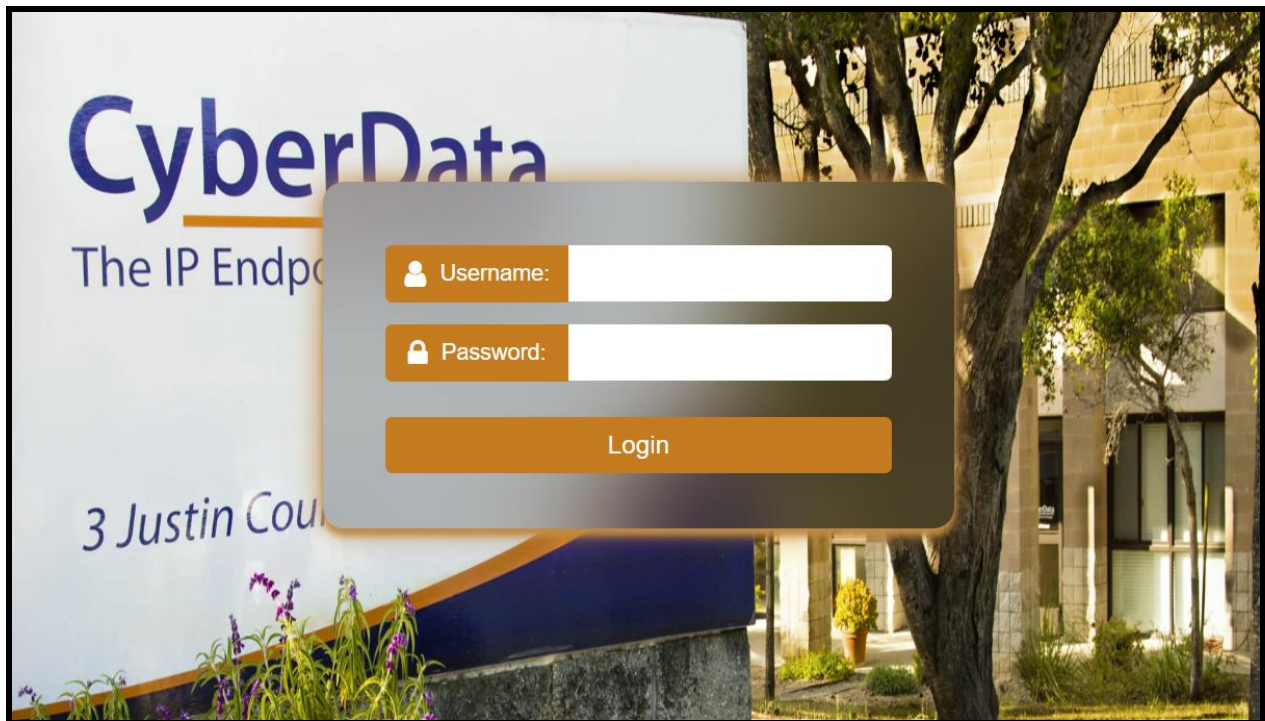
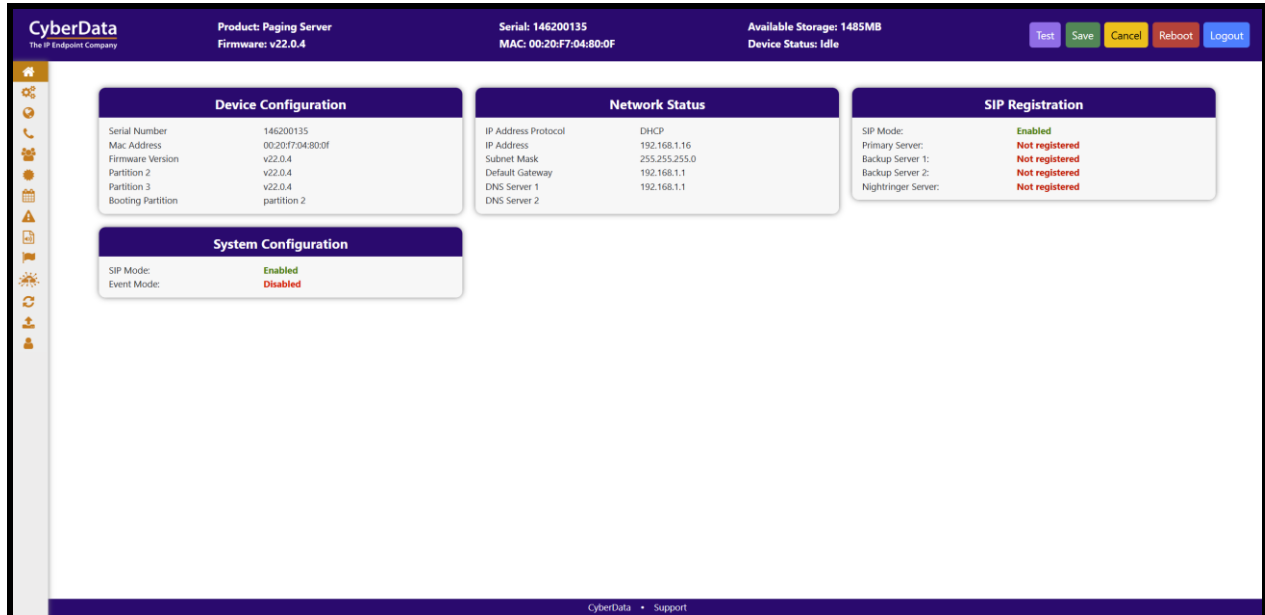


Figure 2-8: Home Page



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

3. On the Home Page, click on **Device** to access the Device page.

Figure 2-9: Device Settings

The screenshot displays the CyberData web interface for configuring a Paging Server. The top navigation bar includes the CyberData logo, product details (Paging Server, Firmware v22.0.4), device identification (Serial: 146200135, MAC: 00:20:F7:04:80:0F), storage information (1485MB available), and status (Idle). A sidebar on the left contains icons for various system functions. The main content area is divided into three primary configuration sections: **Line-in Settings**, **Time Settings**, and **Misc Settings**.
Line-in Settings includes: Line-in to Line-out Loopback (OFF), Line-in Gain (127), Line-in Playback Volume (8), Line-in to Multicast (OFF), Multicast Address (224.1.2.3), Multicast Port (2000), Detect Line-in Silence (OFF), Multicast Polycom Paging (OFF), and Multicast Polycom Channel (1).
Time Settings includes: NTP Server(s) (north-america.pool.ntp.org), NTP Timezone (America/Los_Angeles (-8)), and Current Time (Mon, 19 Jan 2026 10:18:54).
Misc Settings includes: Device Name (Paging Server), Bypass DTMF Menu (ENABLED), Beep on Init (OFF), and Multicast TTL (255).
A **Relay Settings** section at the bottom shows Relay Status as 'Locked' and Relay on Local Audio as 'OFF'. Action buttons (Test, Save, Cancel, Reboot, Logout) are located in the top right corner of the interface.

4. Adjust the **NTP Server**, as necessary.
5. Adjust the **NTP Timezone**, as necessary.
6. Enable **Bypass DTMF Menus**.
7. **Save**.
8. Press **SIP** to navigate to the SIP configuration page.
9. Enter the provisioning information from the **Generic Paging Device Provisioning** popup window.
10. Set the **SIP Transport Protocol** to **TLS**.
11. Verify that **TLS Version** is set to **1.2**.
12. Set the **Re-registration interval** to **30**.
13. Set the **Keep Alive Period** to **0**.
14. Set **SRTP** to **Enabled or Mandatory**

***Note:** Enabled allows both encrypted and unencrypted calls, whereas Mandatory will allow only encrypted call.*

15. **Save and Reboot.**

Figure 2-10: SIP Configuration

The screenshot displays the configuration interface for a CyberData device, specifically for SIP settings. The interface is divided into three main sections: SIP Settings, SIP Server Settings, and Nighthringer Settings. At the top, there is a header bar with the CyberData logo, product information (Paging Server, Firmware v22.0.4), serial and MAC addresses, available storage (1485MB), and device status (Idle). Navigation buttons (Test, Save, Cancel, Reboot, Logout) are located in the top right corner.

SIP Settings:

- SIP Operation: **ENABLED** (dropdown)
- SIP Registration: **ENABLED** (dropdown)
- Buffer SIP Calls: **DISABLED** (dropdown)
- Beep Before Paging: **OFF** (dropdown)
- Remote SIP Port: 5060
- Local SIP Port: 5060
- SIP Transport Protocol: **TLS** (dropdown)
- TLS Version: **1.2** (dropdown)
- Verify Server Certificate: **OFF** (dropdown)
- Outbound Proxy: sip12.ringcentral.com
- Outbound Proxy Port: 5096
- Cisco SRST: **OFF** (dropdown)
- Disable rport Discovery: **OFF** (dropdown)
- Keep Alive Timeout: 0 milliseconds (ms)
- Terminate call after delay: 0 seconds
- Audio Codec: **PCMU (G.711)** (dropdown)
- RTP Port (even): 10500
- Asymmetric RTP: **OFF** (dropdown)
- Jitter Buffer: 50
- RTP Encryption (SRTP): **MANDATORY** (dropdown)

SIP Server Settings:

- Primary SIP Server Status: **Registered**
- Primary SIP Server: sip.ringcentral.com
- Primary SIP User ID: 18312234700*804821150011
- Primary SIP Auth ID: 804821150011
- Primary SIP Auth Password: *****
- Registration Interval: 30 seconds
- Backup SIP Server 1 Status: **Not registered**
- Backup SIP Server 1: Host or IP address
- Backup SIP User ID: Backup SIP User ID
- Backup SIP Auth ID: Backup SIP Auth ID
- Backup SIP Auth Password: Backup SIP Auth Password
- Registration Interval: 360 seconds
- Backup SIP Server 2 Status: **Not registered**
- Backup SIP Server 2: Host or IP address
- Backup SIP User ID: Backup SIP User ID
- Backup SIP Auth ID: Backup SIP Auth ID
- Backup SIP Auth Password: Backup SIP Auth Password
- Registration Interval: 360 seconds

Nighthringer Settings:

- Nighthringer SIP Server Status: **Not registered**
- Nighthringer SIP Server: Host or IP address
- Nighthringer SIP User ID: User ID
- Nighthringer SIP Auth ID: Auth ID
- Nighthringer SIP Auth Password: Password
- Registration Interval: 360 seconds
- Nighthringer to Multicast: **OFF** (dropdown)
- Multicast Address: 224.1.2.32
- Multicast Port: 2020
- Polycorn Paging: **OFF** (dropdown)
- Polycorn Channel: 1

At the bottom of the interface, there is a footer with the text "CyberData • Support".

Verify the Paging Extension is Registered

After the device has rebooted and initialized to store changes the device should show as **Registered** in green text in the SIP Registration column.

Additionally, the registration status can be verified with RingCentral through the Admin Portal. From the **Phones & Devices** menu, select **Devices** and the Paging Device just created for the device. The status should show as “online” in the **Device Details**.

Figure 2-11: Device Details – Status

Phones & Devices » Paging Devices				
Search		Q	Status	+ Add Device
Delete				
☐	Status	Name	Assigned Groups	Actions
☐	✖	CyberData Paging Amp	Interop Testing	⋮
☐	✖	CyberData SIP Paging Adapter		⋮
☐	✔	CyberData SIP Paging Server		⋮

2.2 Paid Extension

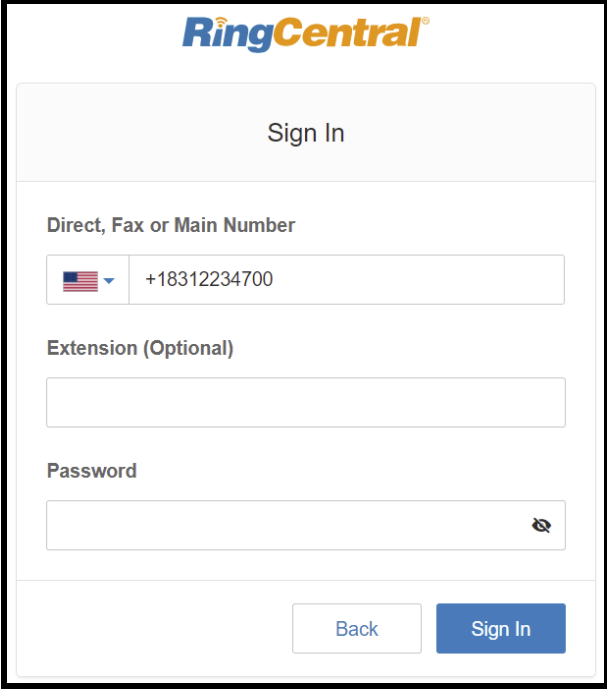
A paid extension allows for full functionality out of the CyberData device. Most notably is two way talkback requires a paid extension. Equipment like a SIP Intercom or Strobe require a paid extension to work on RingCentral.

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 RingCentral user must be designated for the device. Use the following steps to create a user and provision an IP phone for the primary extension through the RingCentral Admin Portal.

1. Login to the RingCentral Admin Portal.

Figure 2-12: RingCentral Admin Portal Login



The image shows the RingCentral Admin Portal login interface. At the top is the RingCentral logo. Below it is a 'Sign In' header. The form contains three main input sections: 'Direct, Fax or Main Number' with a country code dropdown (showing the US flag) and a text field containing '+18312234700'; 'Extension (Optional)' with an empty text field; and 'Password' with an empty text field and a toggle icon. At the bottom are two buttons: 'Back' and 'Sign In'.

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

Figure 2-13: Add User Button

The screenshot shows the RingCentral Admin Portal interface. The top navigation bar includes 'Phone System', 'Users' (highlighted with a yellow box), 'Reports', 'Call Log', 'Billing', and 'Tools'. The left sidebar contains 'User list' (highlighted with a blue box), 'Roles', 'User groups', and 'Templates'. The main content area is titled 'Users With Extensions' and 'Unassigned Extensions'. It features a search bar, filters for 'Status' and 'Roles', and a 'Department' dropdown. A green box highlights the '+ Add User' button. Below the filters is a table of users with columns: Status, Name, Number, Ext., Roles, Department, and Msg. The table lists several users, including 'Available User2', 'Cameron Device', 'Cameron Night...', 'Cameron Snom', 'CyberData Cor...', 'Group User', 'Interop Polyc...', 'Interop Snom360', 'Interop Strobe', 'Kenny_phone 2', and 'Kenny_phone 3'. Each row has a 'Disable' link in the 'Msg.' column.

Status	Name	Number	Ext.	Roles	Department	Msg.
Available User2			945	Standard (Intern...		0 / 0
Cameron Device	(831) 272-0654	934	Standard (Intern...		0 / 0	Resend Invite Delete
Cameron Night...	(831) 272-0641	935	Standard (Intern...		0 / 0	Resend Invite Delete
Cameron Snom	(831) 233-3994	932	Super Admin		3 / 3	Disable
CyberData Cor...	(303) 872-5806	101	Super Admin		9 / 9	
Group User		943	Standard (Intern...		3 / 3	Disable
Interop Polyc...	(831) 975-2610	104	Standard (Intern...		1 / 1	Disable
Interop Snom360	(831) 233-3992	103	Super Admin		5 / 5	
Interop Strobe	(669) 900-4551	942	Standard (Intern...		1 / 1	Disable
Kenny_phone 2	(831) 741-4265	938	Standard (Intern...		2 / 2	Disable
Kenny_phone 3	(831) 272-0630	939	Standard (Intern...		6 / 6	Disable

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

Figure 2-14: Add User Popup

The screenshot shows a modal window titled "Add Users" with a close button (X) in the top right corner. Below the title is a progress bar with four steps: "1 Location", "2 Add Users", "3 Shipping Address", and "4 Confirmation". The "1 Location" step is currently active and underlined. The main content area is titled "Select a Location" and contains two radio button options: "Domestic" (which is selected) and "International". At the bottom right of the modal, there are two buttons: "Cancel" and "Next". The "Next" button is highlighted with a green rectangular border.

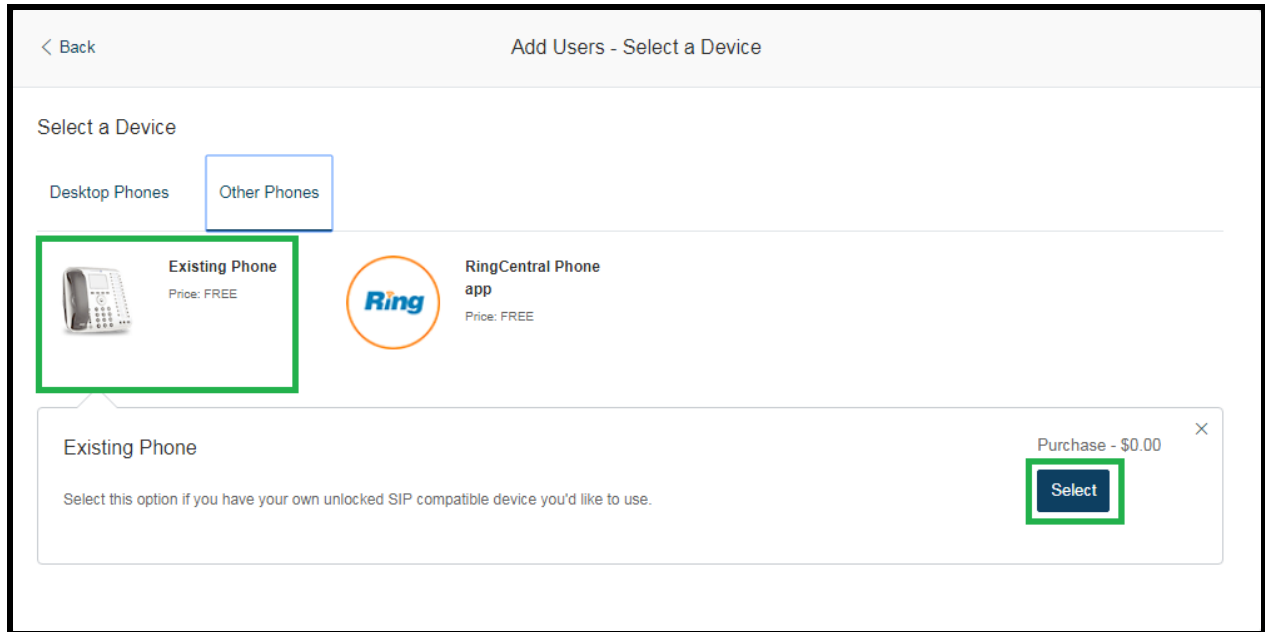
4. In the subsection **Add Users with Phones**, select the number of users, state, area code, and device.

Figure 2-15: Pick a Phone Number

The screenshot shows the same "Add Users" modal window, but now at step "2 Add Users". The progress bar shows "1 Location" as completed with a green checkmark, and "2 Add Users" as the current step. Below the progress bar are two tabs: "Add Users With Phones" (which is selected and underlined) and "Add Users Without Phones". The main content area is titled "Account Status" and displays the following information: "Your plan: 20 - 99 Users", "Used: 25", "Available: 0", and "Available for purchase: 74". Below this, a message states: "You can add multiple users at a time if they will all use the same area code. [Learn More](#)". At the bottom, there is a form with four fields: "Number of Users" (containing the value "1"), "State" (a dropdown menu with "Select" visible), "Area Code" (a dropdown menu with "Select" visible), and "Device" (a dropdown menu with "Select a Device... >" visible). The "Number of Users", "State", and "Area Code" fields are grouped together and highlighted with a yellow rectangular border. The "Device" field is highlighted with a green rectangular border. To the right of these fields is a grey "Add" button. At the bottom right of the modal, there are two buttons: "Back" and "Next".

5. A prompt will ask to select a phone type. Choose **Other Phones**, and then make sure **Existing Phone** is selected. Press **Select**.

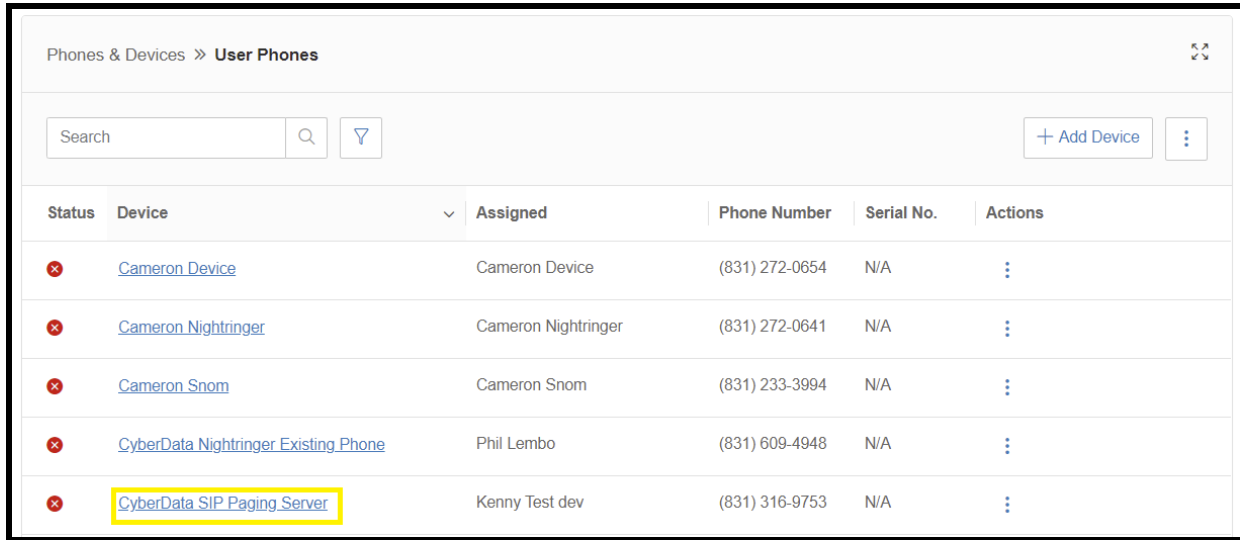
Figure 2-16: Select Phone Type



6. The process will lead through 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 the order.

- From the **Phones & Devices** menu, select **User Phones** and select the user phone designated for the device.

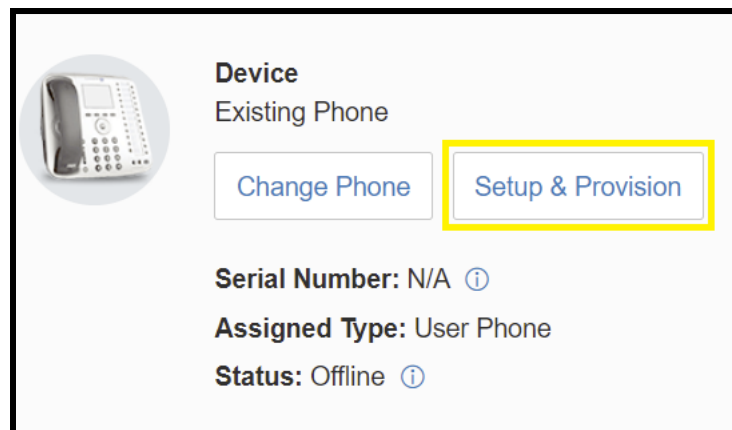
Figure 2-17: Select User



Status	Device	Assigned	Phone Number	Serial No.	Actions
✖	Cameron Device	Cameron Device	(831) 272-0654	N/A	⋮
✖	Cameron Nightringer	Cameron Nightringer	(831) 272-0641	N/A	⋮
✖	Cameron Snom	Cameron Snom	(831) 233-3994	N/A	⋮
✖	CyberData Nightringer Existing Phone	Phil Lembo	(831) 609-4948	N/A	⋮
✖	CyberData SIP Paging Server	Kenny Test dev	(831) 316-9753	N/A	⋮

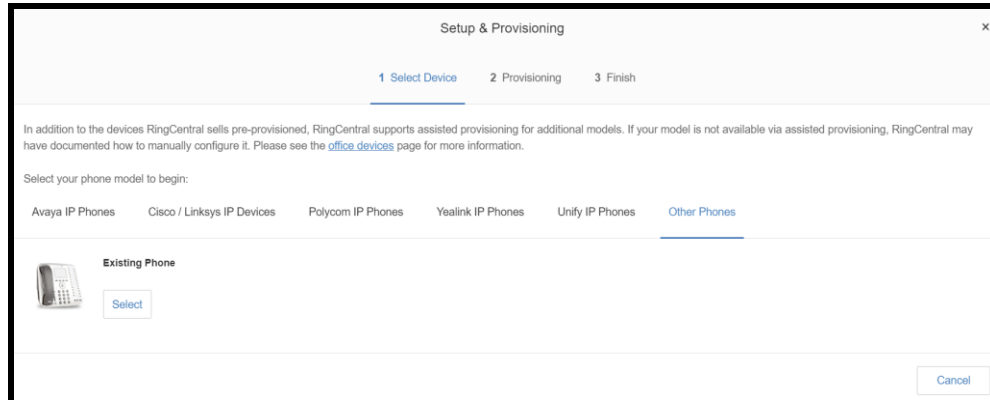
- From the Device's page press the **Setup & Provision** button.

Figure 2-18: Setup & Provision



- A popup window labeled **Setup & Provisioning** will appear. Select **Other Phones** and click **Existing Phone**.

Figure 2-19: Existing Phone



10. A popup window labeled **Assisted Generic IP Phone/Adaptor Provisioning** will appear. The provisioning information to register the primary extension with RingCentral. Make sure to select an Outbound proxy in your area.

Figure 2-20: IP Phone Provisioning Information

Manual Provisioning
To connect your device with RingCentral services, setup your device following the steps below. Configuration for each device may vary, please check with your device's manufacturer for specific instructions. [Copy](#)

Step 1: Will you be using secure voice transport on this device?
☒ Yes - The device must support Transport Protocol version TLS 1.2 [Learn more](#)
☐ No

Step 2: Set TLS on your device's Transport Protocol

Step 3: Enable Offer and Answer on the device's SRTP (Secure Real-Time Transport Protocol)

Step 4: Configure SIP information

Field	Value
SIP Domain	sip.ringcentral.com:5060
Remote SIP port	5060
Local SIP port	5060
Outbound Proxy	sip12.ringcentral.com:5096
Outbound Proxy Port	5096
User Name	18312755996
Password	
Authorization ID	804756843011

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.

Table 2-2: CyberData Configuration Settings

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	Yes
Codec dropdown	PCMU (G.711, u-law)
SIP Transport Protocol	TLS
TLS Version	1.2 only (recommended)
SRTP	Enabled or Mandatory

Configure SIP Parameters

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.

***Note:** CyberData devices require an HTTPS connection, if a redirect does not occur input https:// before the IP address of the device.*

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

Username: admin

Password: admin

Figure 2-21: Web Interface Login

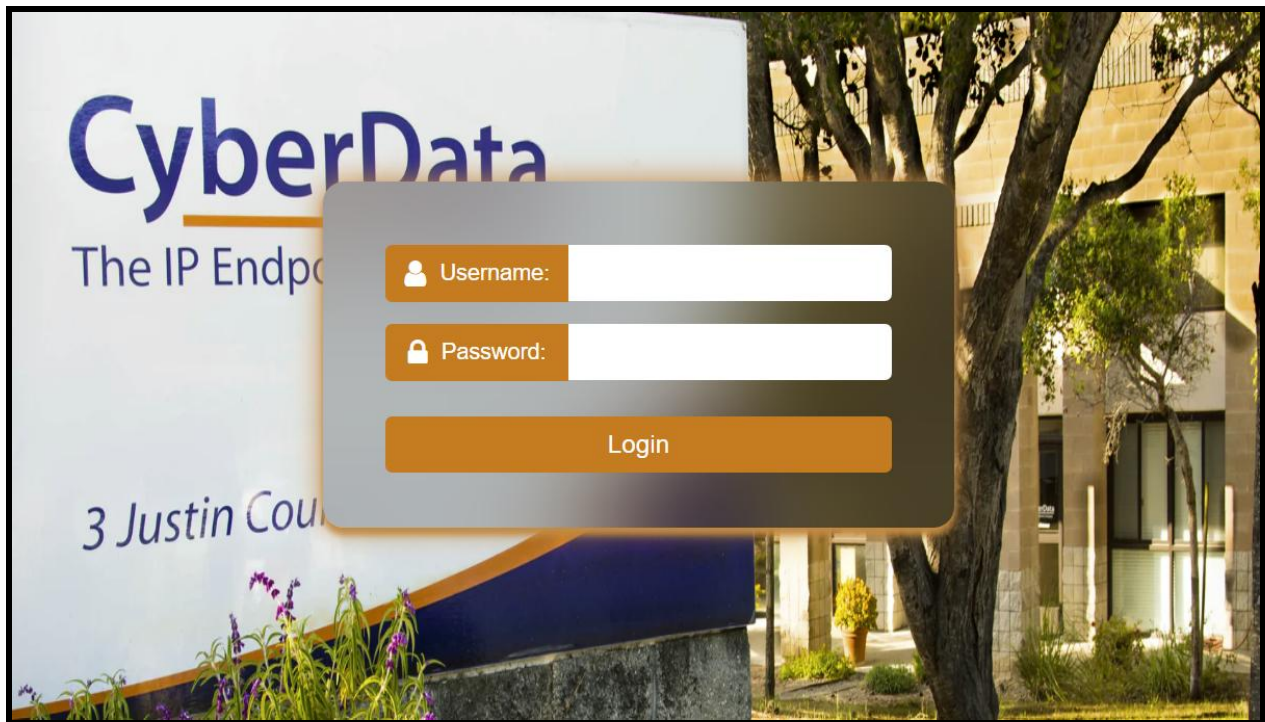
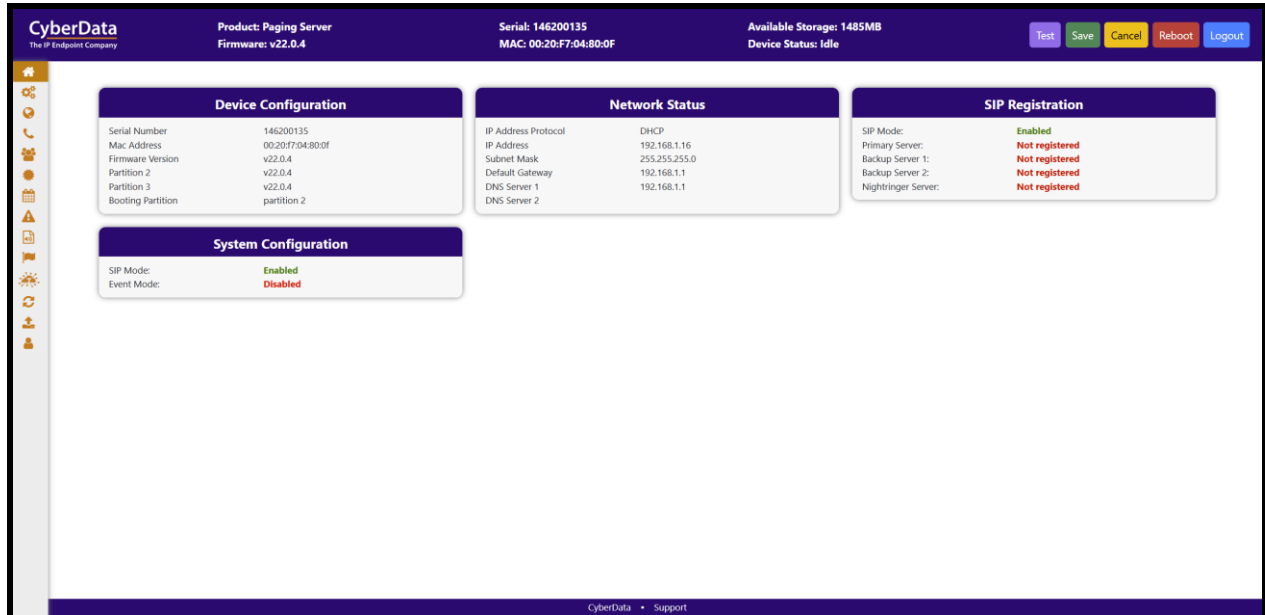


Figure 2-22: Home Page



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

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

Figure 2-23: Device Settings

The screenshot displays the CyberData web interface for configuring a Paging Server. The top header bar contains the following information: Product: Paging Server, Firmware: v22.0.4, Serial: 146200135, MAC: 00:20:F7:04:80:0F, Available Storage: 1485MB, and Device Status: Idle. On the right side of the header are buttons for Test, Save, Cancel, Reboot, and Logout. The left sidebar contains various navigation icons. The main configuration area is divided into four panels:

- Line-in Settings:** Includes Line-in to Line-out Loopback (OFF), Line-in Gain (127), Line-in Playback Volume (8), Line-in to Multicast (OFF), Multicast Address (224.1.2.3), Multicast Port (2000), Detect Line-in Silence (OFF), Multicast Polcom Paging (OFF), and Multicast Polcom Channel (1).
- Time Settings:** Includes NTP Server(s) (north-america.pool.ntp.org), NTP Timezone (America/Los_Angeles (-8)), and Current Time (Mon, 19 Jan 2020 10:46:51).
- Misc Settings:** Includes Device Name (Paging Server), Bypass DTMF Menu (DISABLED), Beep on Init (OFF), and Multicast TTL (255).
- Relay Settings:** Includes Relay Status (Locked) and Relay on Local Audio (OFF).

At the bottom of the interface, there is a footer with the text "CyberData • Support".

4. Adjust the **NTP Server** as necessary.
5. Adjust the **Timezone** as necessary.
6. **Save.**
7. Press **SIP** to navigate to the SIP configuration page.
8. Set the **SIP Transport Protocol** to **TLS**.
9. Enter the provisioning information from the **Setup & Provisioning** popup window.
10. Verify that **TLS Version** is set to **1.2**.
11. Set the **Re-registration interval** to **30**.
12. Set the **Keep Alive Period** to **0**.
13. Set **SRTP** to **Enabled**.
14. **Save and Reboot.**

Figure 2-24: SIP Configuration

The screenshot displays the CyberData configuration web interface for a RingCentral Paging Server. The interface is divided into three main configuration panels: SIP Settings, SIP Server Settings, and Nighthringer Settings. At the top, a status bar provides device information: Product: Paging Server, Firmware: v22.0.4, Serial: 146200135, MAC: 00:20:F7:04:80:0F, Available Storage: 1485MB, and Device Status: Idle. Action buttons (Test, Save, Cancel, Reboot, Logout) are located in the top right corner.

SIP Settings Panel:

- SIP Operation: **ENABLED** (dropdown)
- SIP Registration: **ENABLED** (dropdown)
- Buffer SIP Calls: **DISABLED** (dropdown)
- Beep Before Paging: **OFF** (dropdown)
- Remote SIP Port: 5060 (text input)
- Local SIP Port: 5060 (text input)
- SIP Transport Protocol: **TLS** (dropdown)
- TLS Version: **1.2** (dropdown)
- Verify Server Certificate: **OFF** (dropdown)
- Outbound Proxy: sip12.ringcentral.com (text input)
- Outbound Proxy Port: 5096 (text input)
- Cisco SRST: **OFF** (dropdown)
- Disable rport Discovery: **OFF** (dropdown)
- Keep Alive Timeout: 0 milliseconds (ms) (text input)
- Terminate call after delay: 0 seconds (text input)
- Audio Codec: **PCMU (G.711)** (dropdown)
- RTP Port (even): 10500 (text input)
- Asymmetric RTP: **OFF** (dropdown)
- Jitter Buffer: 50 (text input)
- RTP Encryption (SRTP): **MANDATORY** (dropdown)

SIP Server Settings Panel:

- Primary SIP Server Status: **Not registered**
- Primary SIP Server: sip.ringcentral.com (text input)
- Primary SIP User ID: 18312755996 (text input)
- Primary SIP Auth ID: 804756843011 (text input)
- Primary SIP Auth Password: ***** (password field)
- Registration Interval: 360 seconds (text input)
- Backup SIP Server 1 Status: **Not registered**
- Backup SIP Server 1: Host or IP address (text input)
- Backup SIP User ID: Backup SIP User ID (text input)
- Backup SIP Auth ID: Backup SIP Auth ID (text input)
- Backup SIP Auth Password: Backup SIP Auth Password (password field)
- Registration Interval: 360 seconds (text input)
- Backup SIP Server 2 Status: **Not registered**
- Backup SIP Server 2: Host or IP address (text input)
- Backup SIP User ID: Backup SIP User ID (text input)
- Backup SIP Auth ID: Backup SIP Auth ID (text input)
- Backup SIP Auth Password: Backup SIP Auth Password (password field)
- Registration Interval: 360 seconds (text input)

Nighthringer Settings Panel:

- Nighthringer SIP Server Status: **Not registered**
- Nighthringer SIP Server: Host or IP address (text input)
- Nighthringer SIP User ID: User ID (text input)
- Nighthringer SIP Auth ID: Auth ID (text input)
- Nighthringer SIP Auth Password: Password (password field)
- Registration Interval: 360 seconds (text input)
- Nighthringer to Multicast: **OFF** (dropdown)
- Multicast Address: 224.1.2.32 (text input)
- Multicast Port: 2020 (text input)
- Polycorn Paging: **OFF** (dropdown)
- Polycorn Channel: 1 (text input)

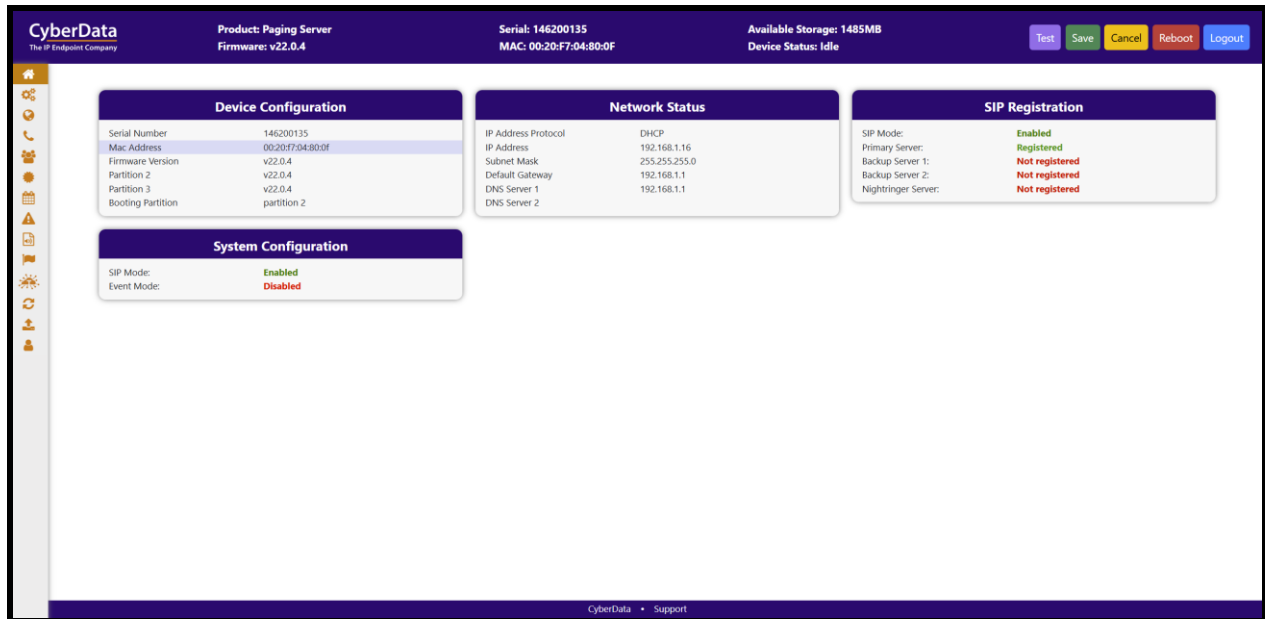
The bottom of the interface shows the CyberData logo and a link to Support.

Verify the Extension is Registered

After the device has rebooted and initialized to store changes the device should show as **Registered** in green text in the SIP Registration column.

Additionally, the registration status can be verified with RingCentral through the Admin Portal. From the **Phones & Devices** menu, select **Devices** and find the device used in the previous steps. The status should show as “online” in the **Device Details**.

Figure 2-25: Phone Details – Status



Once the Primary extension has registered with RingCentral and has been configured with the appropriate Device settings for the installation, a RingCentral phone may be used to dial the extension.

3.0 Configuration Procedure: Nightringer

What is a Nightringer?

Most CyberData devices have 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.

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 the Nightringer extension must be provisioned as an IP phone 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.

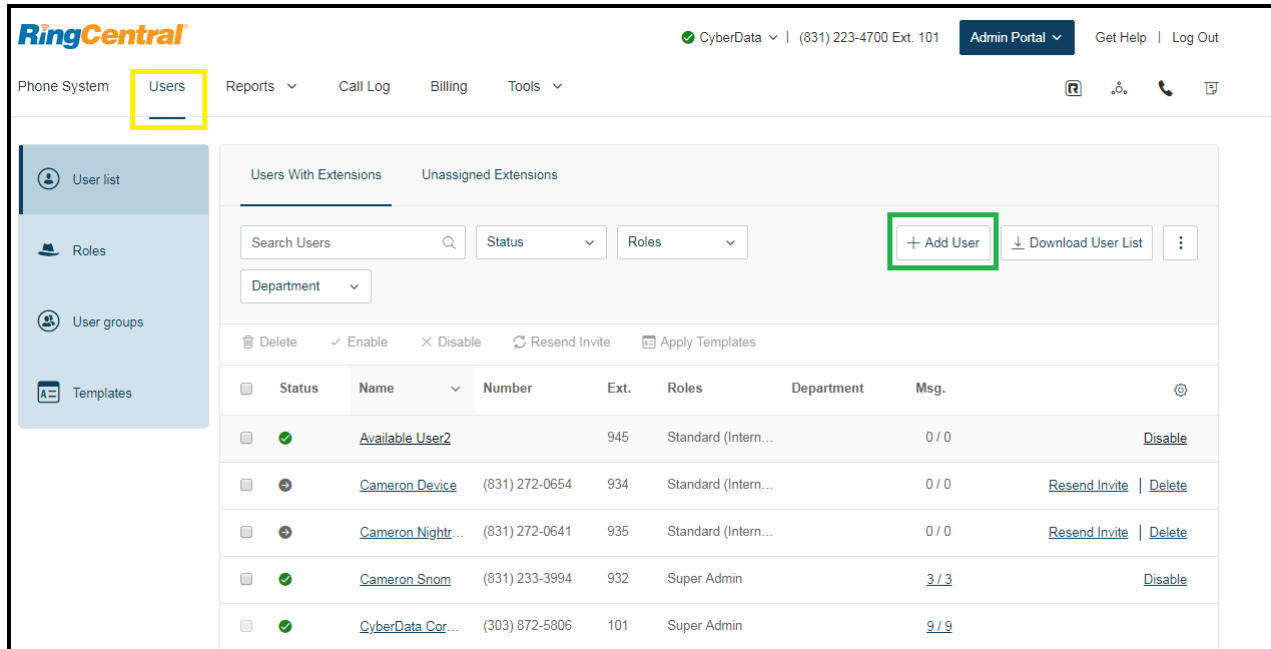
Add an IP Phone

To provision the device'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 **Users** menu, click the **Add** button.

Figure 3-1: Add User Button



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

Figure 3-2: Add User Location

The screenshot shows a modal window titled "Add Users" with a close button (X) in the top right corner. Below the title bar is a progress indicator with four steps: "1 Location", "2 Add Users", "3 Shipping Address", and "4 Confirmation". The "1 Location" step is currently active and underlined. The main content area of the window is titled "Select a Location" and contains two radio button options: "Domestic" (which is selected) and "International". At the bottom right of the window, there are two buttons: "Cancel" and "Next". The "Next" button is highlighted with a green rectangular border.

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

Figure 3-3: Add User Phone Number

Learn More'. Below this is a form with four fields: 'Number of Users' (text input with '1'), 'State' (dropdown menu with 'Select'), 'Area Code' (dropdown menu with 'Select'), and 'Device' (dropdown menu with 'Select a Device... >'). The 'Number of Users', 'State', and 'Area Code' fields are highlighted with a yellow border, and the 'Device' field is highlighted with a green border. To the right of these fields is an 'Add' button. At the bottom right are 'Back' and 'Next' buttons."/>

Add Users

✓ Location 2 Add Users 3 Shipping Address 4 Confirmation

Add Users With Phones Add Users Without Phones

Account Status

Your plan: 20 - 99 Users Used: 25 Available: 0 Available for purchase: 74

You can add multiple users at a time if they will all use the same area code. [Learn More](#)

Number of Users	State	Area Code	Device
1	Select ▼	Select ▼	Select a Device... >

Add

Back Next

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

Figure 3-4: Select Phone Type

< Back Add Users - Select a Device

Select a Device

Desktop Phones Other Phones

Existing Phone
Price: FREE

RingCentral Phone app
Price: FREE

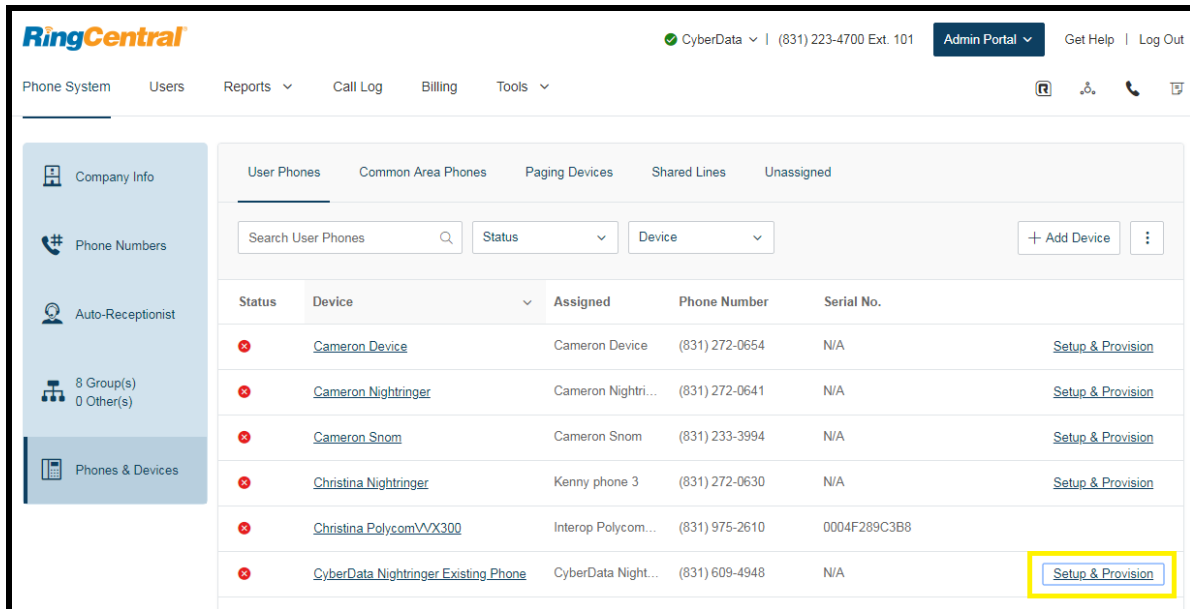
Existing Phone
Select this option if you have your own unlocked SIP compatible device you'd like to use.

Purchase - \$0.00

Select

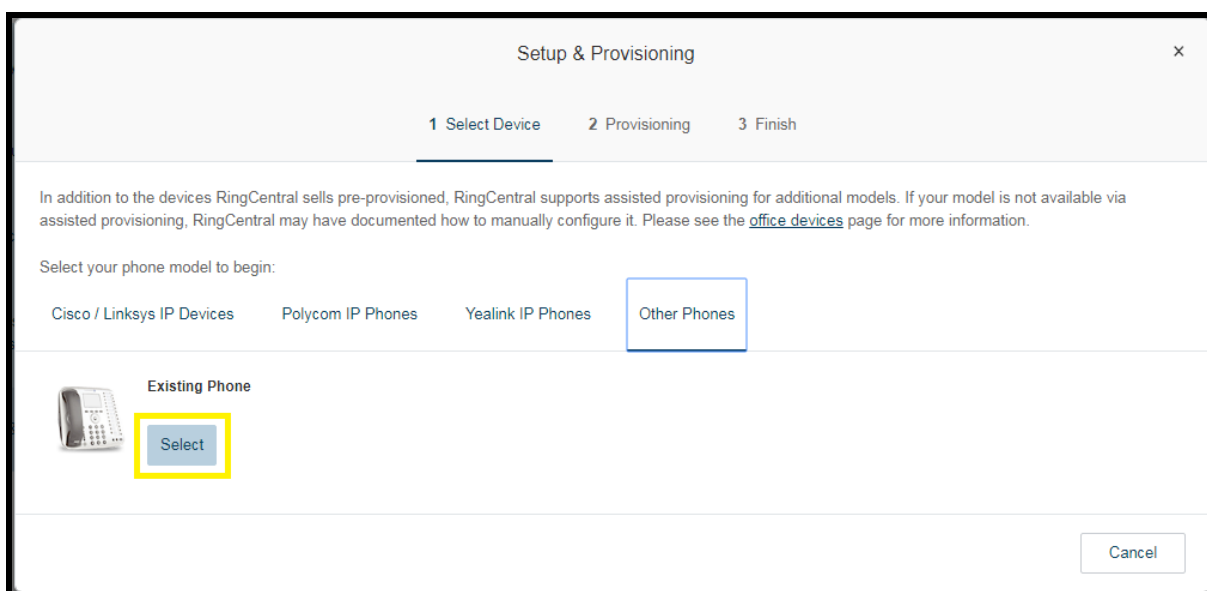
- From the **Phones & Devices** menu, select **User Phones** and then select the user phone created for the Nightringer. Click **Setup and Provision**.

Figure 3-5: Setup and Provision



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

Figure 3-6: Assisted Provisioning – Step 1



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

Figure 3-7: IP Phone Provisioning Information

x

Setup & Provisioning

✓ Select Device
✓ Provisioning
3 Finish

Manual Provisioning

To connect your device with RingCentral services, setup your device following the steps below. Configuration for each device may vary, please check with your device's manufacturer for specific instructions. Copy

Step 1: Will you be using secure voice transport on this device?

☒ Yes - The device must support Transport Protocol version TLS 1.2 [Learn more](#)

☐ No

Step 2: Set TLS on your device's Transport Protocol

Step 3: Enable Offer and Answer on the device's SRTP (Secure Real-Time Transport Protocol)

Step 4: Configure SIP information

Field	Value
SIP Domain	sip.ringcentral.com:5060
Remote SIP port	5060
Local SIP port	5060
Outbound Proxy	sip12.ringcentral.com:5096 ▼
Outbound Proxy Port	5096
User Name	18312755996
Password	
Authorization ID	804756843011

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.

Table 3-1: CyberData Configuration Settings

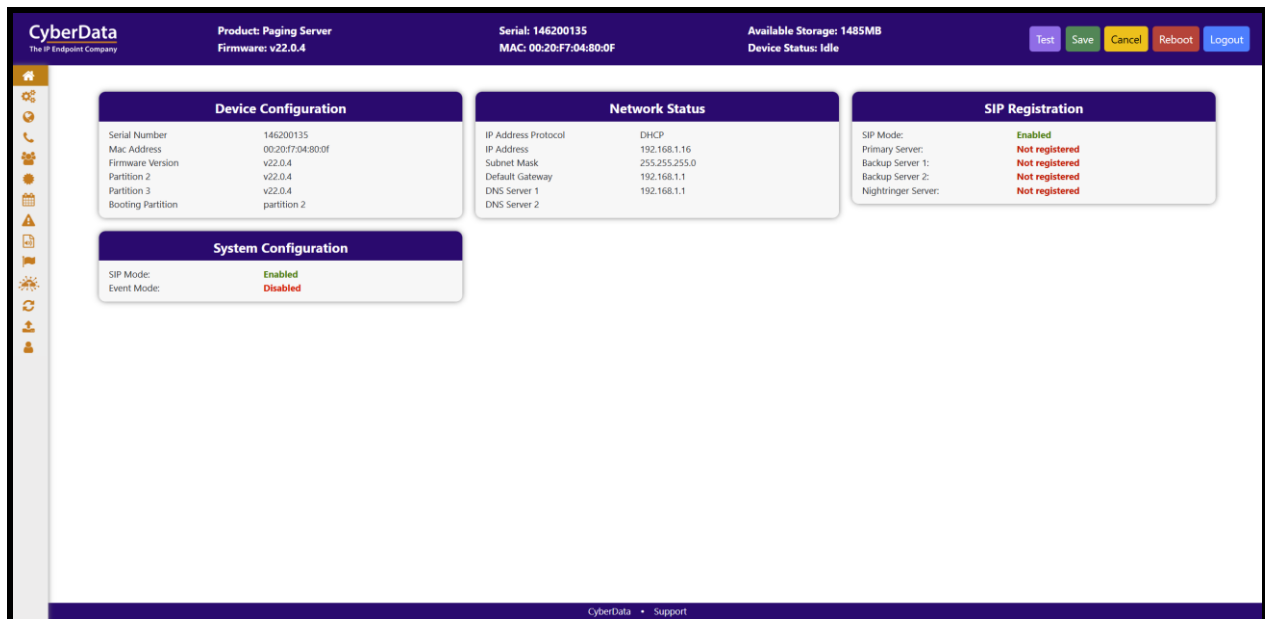
Primary SIP Server field	From the Paging Device Provisioning Information popup: SIP Server
Primary SIP User ID field	From the Paging Device Provisioning Information popup: SIP User ID
Primary SIP Auth ID field	From the Paging Device Provisioning Information popup: Authenticate ID
Primary SIP Auth Password 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)

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 3-8: Home Page of the Web Interface – Nightringer Button



2. Enter the provisioning information from the popup.
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.

Figure 3-9: Nightringer Configuration Page of the Web Interface

CyberData
The IP Endpoint Company

Product: Paging Server
Firmware: v22.0.4

Serial: 146200135
MAC: 00:20:F7:04:80:0F

Available Storage: 1485MB
Device Status: Idle

Test Save Cancel Reboot Logout

SIP Settings

SIP Operation: ☐ ENABLED

SIP Registration: ☐ ENABLED

Buffer SIP Calls: ☐ DISABLED

Beep Before Paging: ☐ OFF

Remote SIP Port: 5060

Local SIP Port: 5060

SIP Transport Protocol: ☐ TLS

TLS Version: 1.2

Verify Server Certificate: ☐ OFF

Outbound Proxy: sip12.ringcentral.com

Outbound Proxy Port: 5096

Cisco SRST: ☐ OFF

Disable rport Discovery: ☐ OFF

Keep Alive Timeout: 0 milliseconds (ms)

Terminate call after delay: 0 seconds

Audio Codec: PCMU (G.711)

RTP Port (even): 10500

Asymmetric RTP: ☐ OFF

Jitter Buffer: 50

RTP Encryption (SRTP): ☐ MANDATORY

SIP Server Settings

Primary SIP Server Status: **Not registered**

Primary SIP Server: 10.0.0.253

Primary SIP User ID: 100

Primary SIP Auth ID: 100

Primary SIP Auth Password: *****

Registration Interval: 360 seconds

Backup SIP Server 1 Status: **Not registered**

Backup SIP Server 1: Host or IP address

Backup SIP User ID: Backup SIP User ID

Backup SIP Auth ID: Backup SIP Auth ID

Backup SIP Auth Password: Backup SIP Auth Password

Registration Interval: 360 seconds

Backup SIP Server 2 Status: **Not registered**

Backup SIP Server 2: Host or IP address

Backup SIP User ID: Backup SIP User ID

Backup SIP Auth ID: Backup SIP Auth ID

Backup SIP Auth Password: Backup SIP Auth Password

Registration Interval: 360 seconds

Nightringer Settings

Nightringer SIP Server Status: **Not registered**

Nightringer SIP Server: sip.ringcentral.com

Nightringer SIP User ID: 18312755996

Nightringer SIP Auth ID: 804756843011

Nightringer SIP Auth Password: *****

Registration Interval: 360 seconds

Nightringer to Multicast: ☐ OFF

Multicast Address: 224.1.2.32

Multicast Port: 2020

Polycorn Paging: ☐ OFF

Polycorn Channel: 1

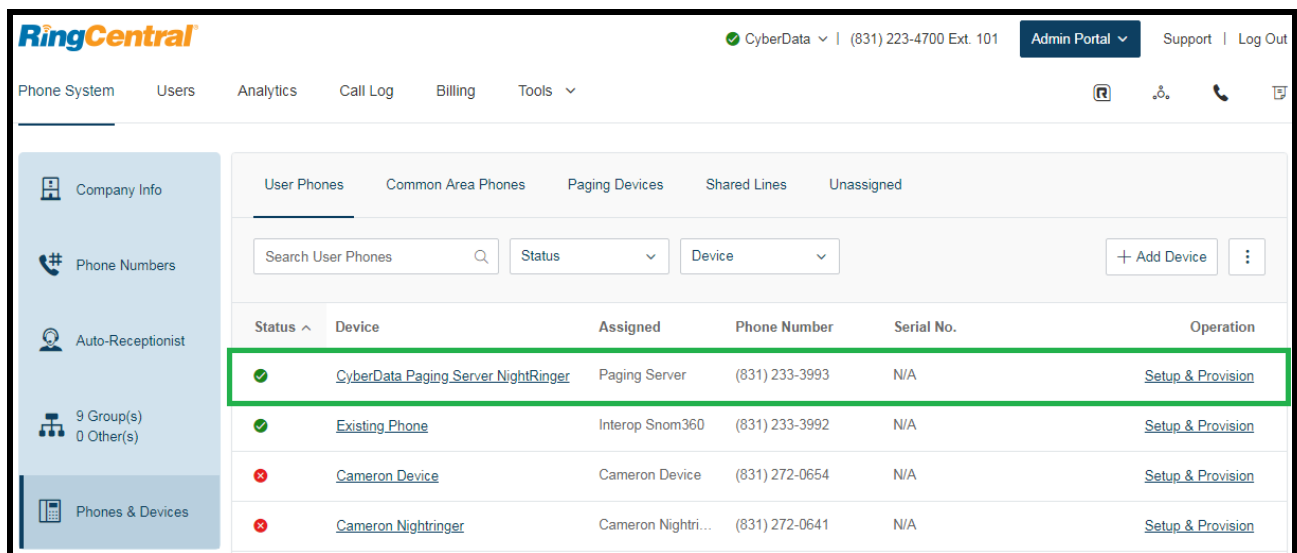
CyberData • Support

Verify the Nightringer is Registered

After the device has rebooted and initialized, refresh the **Home** page of the web interface. The device should show as **Registered** 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*.

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**.

Figure 3-10: Nightringer Phone Details – Status

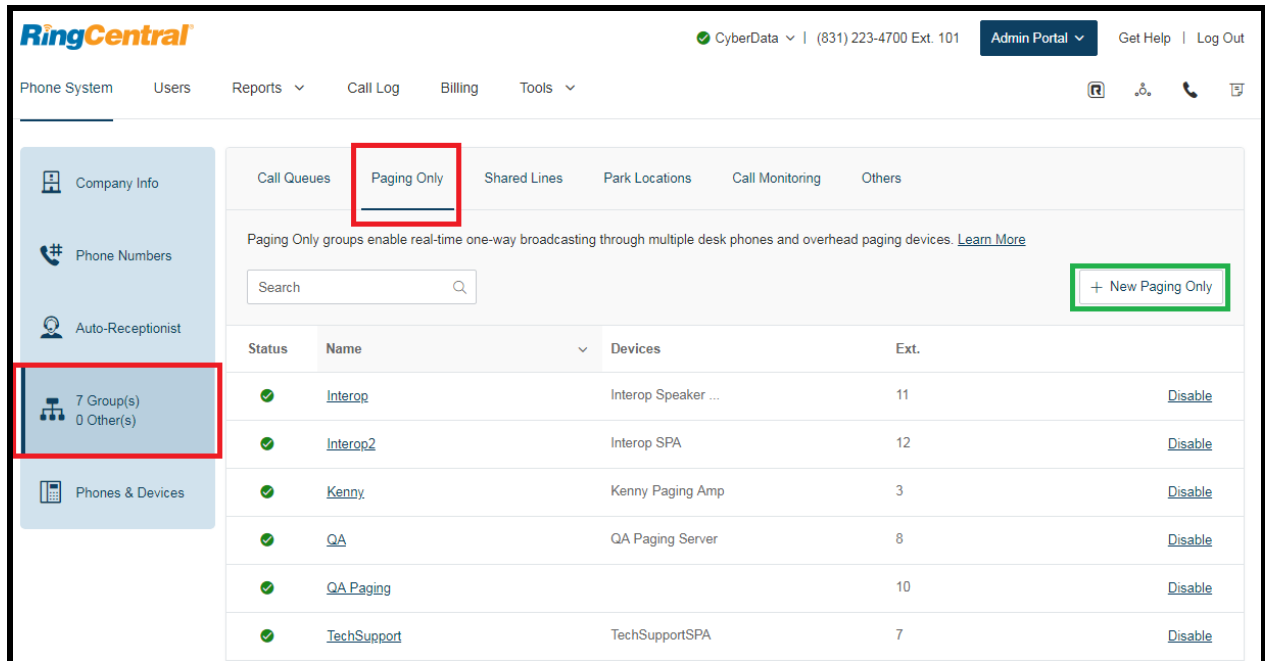


Status	Device	Assigned	Phone Number	Serial No.	Operation
✓	CyberData Paging Server Nightringer	Paging Server	(831) 233-3993	N/A	Setup & Provision
✓	Existing Phone	Interop Snom360	(831) 233-3992	N/A	Setup & Provision
✗	Cameron Device	Cameron Device	(831) 272-0654	N/A	Setup & Provision
✗	Cameron Nightringer	Cameron Nightri...	(831) 272-0641	N/A	Setup & Provision

4.0 Creating a Paging Group

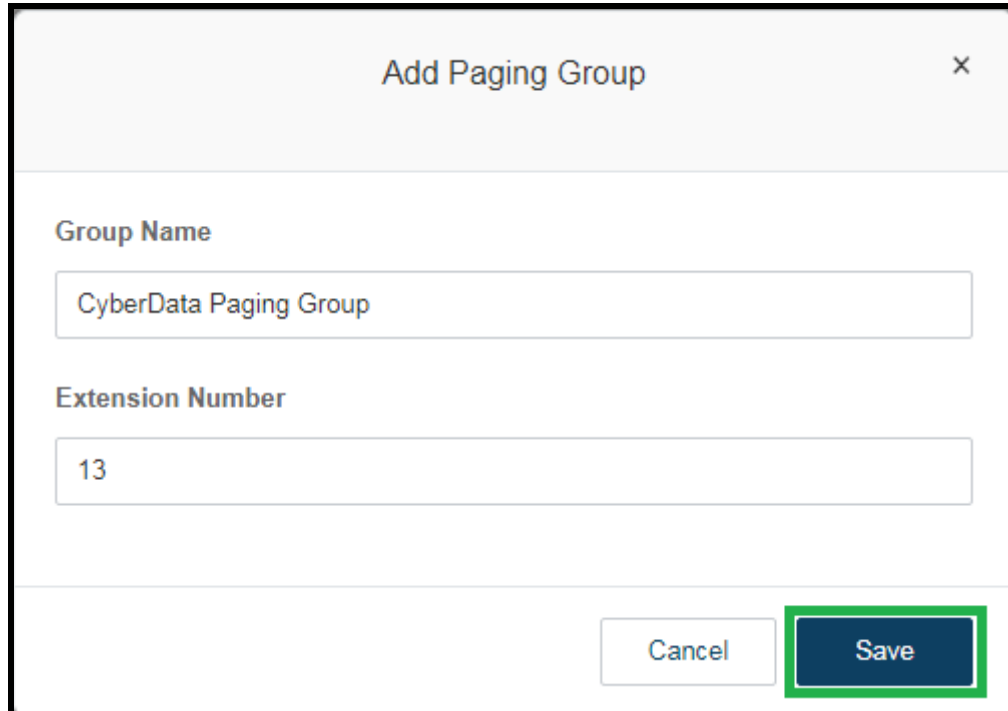
- Next, add the new Paging Device to a *Paging Only* group. From the [n] **Groups** menu, select **Paging Only**, then click **New Paging Group**.

Figure 4-1: Add Group



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

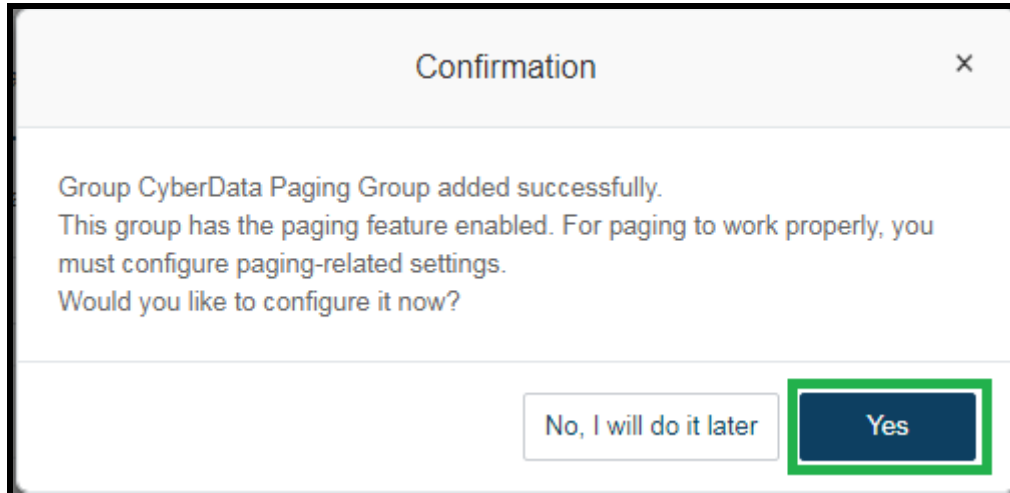
Figure 4-2: Add Paging Group



The screenshot shows a web-based dialog box titled "Add Paging Group". It features a close button (X) in the top right corner. Below the title bar, there are two labeled input fields. The first is "Group Name" with the text "CyberData Paging Group" entered. The second is "Extension Number" with the text "13" entered. At the bottom right of the dialog, there are two buttons: "Cancel" and "Save". The "Save" button is highlighted with a green rectangular border.

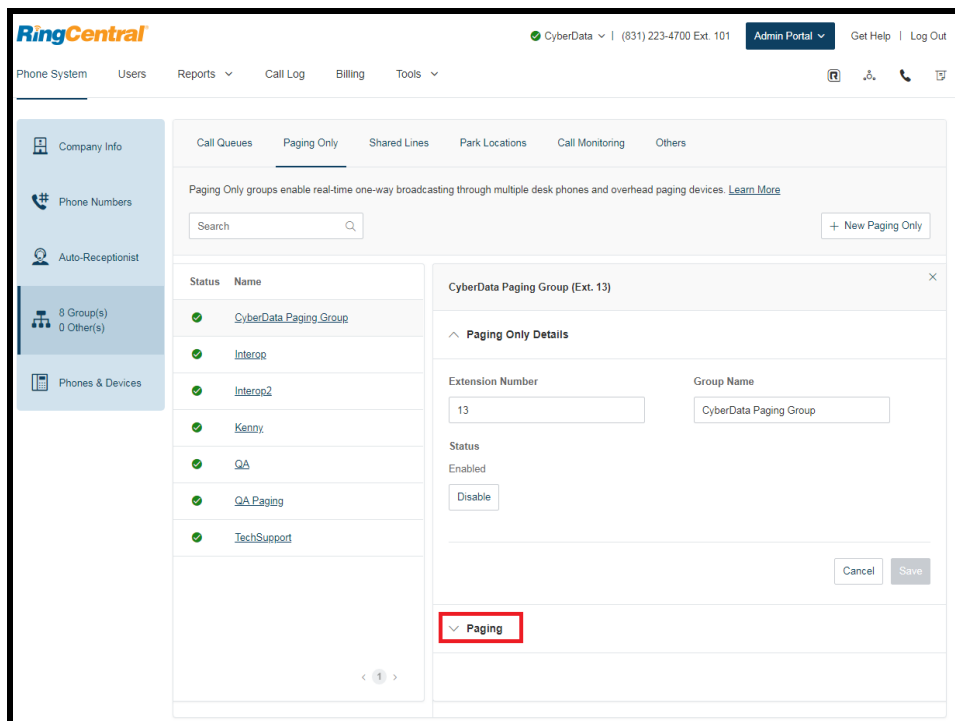
3. A confirmation screen will confirm the paging group has been created. Select **Yes** to configure paging settings.

Figure 4-3: Confirmation



4. 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 4-4: Group Paging Menu



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

Figure 4-5: Devices to Receive Page

^ **Paging**

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.

[Show All](#) | [Show Selected \(2\)](#)

☐	Phone Type	Phone Name	Ext.
☐	User Phone	Christina PolycomVWX300	104
☒	Paging Device	CyberData Paging Amp	-
☒	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	-

Total: 14
Show: 10 < 1 2 >

- 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**.

Figure 4-6: Users Allowed to Page This Group

^
Paging

Devices to Receive Page

Users Allowed to Page this Group

[Show 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 PolycomVWX300	104	
☒	Interop Snom360	103	
☐	Interop Strobe	942	
☐	Kenny phone 2	938	

Total: 23
Show: 10
< 1 2 3 >

- The page redirects back to the group's paging menu after clicking **Save**.

5.0 Products Covered

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

Table 5-1: Setup Equipment

EQUIPMENT	PART NUMBER	FIRMWARE VERSION
SIP PAGING SERVER	011146	V22.0.0 or greater
SIP PAGING ADAPTER	011233	V22.0.0 or greater
SIP PAGING 25V/70V +4 AMPLIFIER	011598	V22.0.0 or greater
SIP OUTDOOR INTERCOM	011567	V22.0.0 or greater
SIP LARGE BUTTON INTERCOM	011186	V22.0.0 or greater
SIP OUTDOOR INTERCOM WITH KEYPAD	011214	V22.0.0 or greater
SIP OUTDOOR INTERCOM WITH RFID	011477	V22.0.0 or greater
SIP EMERGENCY INTERCOM	011209	V22.0.0 or greater
SIP DUAL RELAY CONTROLLER	011484	V22.0.0 or greater
RFID/KEYPAD SECURE ACCESS CONTROL ENDPOINT	011426	V22.0.0 or greater
SIP CALL/ALERT BUTTON	011049	V22.0.0 or greater
SIP OUTDOOR CALL/ALERT BUTTON	011491	V22.0.0 or greater
SIP RGB (MULTI-COLOR) STROBE	011376	V22.0.0 or greater
SIP OUTDOOR RGB (MULTI-COLOR) STROBE	011479	V22.0.0 or greater
VOIP SIP/MULTICAST CEILING MOUNT SPEAKER	011511	V22.0.0 or greater
VOIP SIP/MULTICAST WALL MOUNT SPEAKER	011512	V22.0.0 or greater
SIP SPEAKER WITH TALKBACK	011394	V22.0.0 or greater
SIP IP66 INDOOR/OUTDOOR HORN	011457	V22.0.0 or greater
SIP LOUDSPEAKER AMPLIFIER (POE)	011405	V22.0.0 or greater
SIP PAGING AMPLIFIER	011324	V22.0.0 or greater

6.0 Contact CyberData Corporation

Sales

For sales-related questions, please visit our [Contact CyberData Sales](#) web page for more information.

Technical Support

For CyberData Technical Support, please submit a [Contact CyberData VoIP Technical Support](#) form on our website.

The CyberData VoIP Technical Support Contact form initiates a troubleshooting ticket which CyberData uses for quality assurance purposes.

Additionally, the Contact VoIP Tech Support form tells us which phone system you are using, the make and model of the network switch, and other essential troubleshooting information we need to efficiently assist with a resolution. Please also include as much detail as possible in the Describe Problem section of the form. Your installation is extremely important to us.

Documentation Feedback

We realize changes to the software of the RingCentral solution may render this document obsolete. We welcome and encourage documentation feedback to ensure continued applicability.