

Configuring a Polycom Phone to Listen to Your CyberData V3 Paging Server

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1.0 Introduction

This configuration guide documents the process of configuring Polycom phones to listen to multicast pages from the V3 Paging Server. The V3 Paging Server can send multicast pages to one Polycom Paging Group. The V3 Paging Server's required settings for producing a Polycom page are also documented in this configuration guide.

Before You Start:

1. Is the V3 Paging Server running compatible firmware?

The V3 Paging Server supports Polycom's proprietary multicast paging protocol on firmware versions 7.2.0 and greater.

2. Are the Polycom phones running compatible software?

Polycom Group Paging is supported on UC Software versions 4.0.0 and greater. CyberData completed testing using software version 5.2.0.8330 on Polycom VVX 300 phones.

3. Do you have the admin login and password for the web interfaces of the Polycom phones?

As documented later in this guide, it will be necessary to change the codec for group paging on the Polycom phones. You will need to use the **admin** access to the Polycom phones to change the codec.

2.0 Polycom Phone Configuration Procedure

1. Obtain the IP address of the phone. This procedure varies depending on the Polycom phone model, so you may need to consult the Administrator's Guide for the specific model and UC Software version.
2. Enter the IP address of the phone into the address bar of your web browser. If the phone is running HTTPS mode, you may need to enter **https://** before the IP address. For example, if the IP address of the phone was 10.10.1.178, enter **https://10.10.1.178** into the address bar.
3. When prompted, make sure you have selected to login as **Admin** and enter the password.
4. Navigate to **Settings > Paging/PTT Configuration** to access the multicast paging settings.
5. Note the current **Multicast IP Address** and **Port** values under **Settings** on the **Paging/PTT Configuration** page. The default multicast IP address is **224.0.1.116**. The default port is **5001**.
6. Select the option to **Enable Group Paging** under **Group Paging Configuration** on the **Paging/PTT Configuration** page.
7. Note the **Group No.** values. The CyberData V3 Paging Server will be set to page to **Group 1** on default when Polycom paging is enabled. Make sure **Group 1** is selected for the desired **Group Type**, or change the **Group No.** to match the **Polycom Transit Channel** value in the V3 Paging Server configuration.
8. Enter a **Label** for the paging group. For example, "All Page". The **Label** appears on the phone's LCD display when the phone receives a multicast page for this paging group.
9. Make sure **Payload Size (ms)** is set to **20**. This should be the default value.
10. Select **G.711Mu** for the **Codec**. This codec setting only applies to multicast pages.
11. Click the **Save** button to save changes.

Figure 1. Polycom Paging/PTT Configuration

Paging/PTT Configuration

Settings

Multicast IP Address: 224.0.1.116
 Port: 5001
 Emergency Volume (db): -10
 Call Waiting: Enable Disable
 Compatibility: Enable Disable

Group Paging Configuration

Group Paging: Enable Disable

Group Type	Group No.	Available	Send	Subscribe	Label
Default Group	Group 1	Yes	Yes	Yes	All Page
Priority Group	Group 24	Yes	Yes	Yes	
Emergency Group	Group 25	Yes	Yes	Yes	

Accept While Busy: Enable Disable
 Sender ID:
 Payload Size (ms): 20
 Codec: G.711Mu
 Added Timeout (s): 0
 Continuation Timeout (s): 60

PTT Mode Configuration

Description

The PTT paging feature supports two modes of operation: Push-to-Talk (PTT) mode and Page mode. They can be enabled independently and can be used at the same time.

Field Help

Label
 (ptt.pageMode.group.25.label)
 Descriptive label to use when announcing a page or within a page call appearance to identify the paging group in use.

Configured Source Values

The parameter values from different sources are listed here. If a parameter value is configured from multiple sources, the phone will use the value from the highest-priority source.

Local: Not Applicable
 Web: Not Applicable
 Config: Not Applicable
 SIP: Not Applicable

3.0 V3 Paging Server Configuration Procedure

The V3 Paging Server assumes the Polycom phones will be using the default multicast IP address **224.0.1.116** and port number **5001**. In addition to enabling Polycom paging and verifying the **Polycom Transit Channel value** matches the Polycom phone's **Group No.** value for the desired **Group Type**, you will need to configure the Polycom multicast IP address and port in the V3 Paging Server configuration.

The procedure and screenshots documented in this section correspond to the Polycom phone configuration using the earlier documented procedure.

1. Assuming you have already configured the SIP parameters and registered the V3 Paging Server to your VoIP phone system, navigate to the **Device Configuration** page (Figure 2) in the V3 Paging Server's web interface.

Figure 2. V3 Paging Server Device Configuration Page

CyberData v3 Paging Server

Device Configuration

Miscellaneous Settings

Beep on Initialization:

Beep on page:

Enable line-in to line-out loopback***:

Enable line-in to multicast***:

Multicast Address: 224.1.2.3

Multicast Port: 2000

Detect Line-in Silence:

Enable relay on local audio:

DTMF duration (milliseconds): 500

Enable Polycom Paging on Multicast****:

Polycom Transmit Channel: 1

* You need to reboot for changes to take effect

** "Test Multicast" will send a 5 second ULAW multicast stream to 234.2.1.200:2200

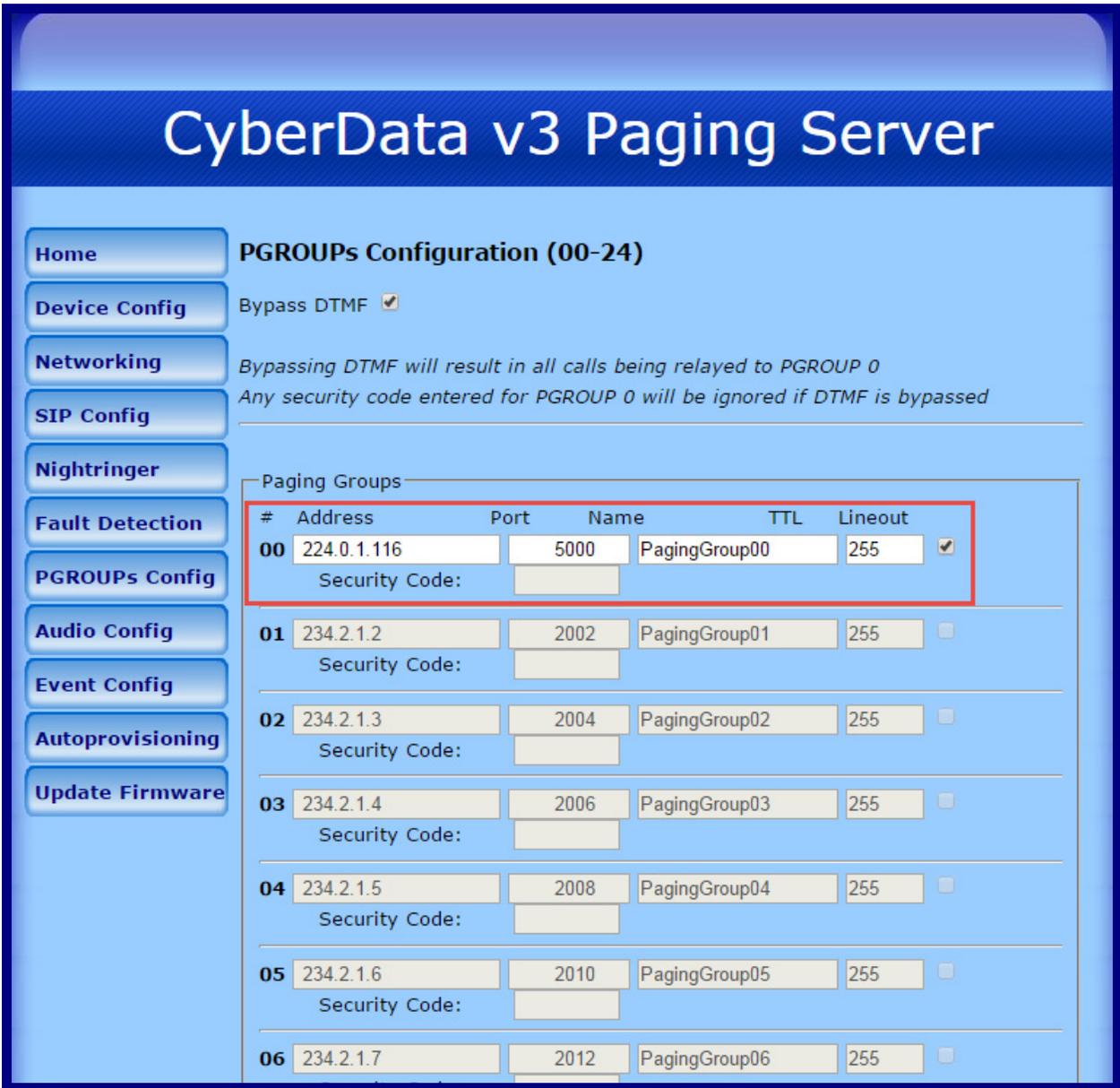
*** Cannot be combined with "Play Line-in Audio via Multicast (Fault Detection)"

**** Enabling Polycom Paging will result in a standard RTP multicast being sent to the specified address and port and a Polycom PTT Page multicast being sent to the specified address and port+1

Save Test Audio Test Multicast ** Test Relay Reboot

2. Check the box to **Enable Polycom Paging on Multicast**.
3. Verify the **Polycom Transmit Channel** value matches the Polycom phone's **Group No.** value for the desired **Group Type**.
4. Click **Save** before leaving the **Device Configuration** page.
5. Navigate to the **PGROUPS Configuration** page (Figure 3).

Figure 3. V3 Paging Server PGROUPS Configuration Page



6. Enter the Polycom Multicast IP Address **224.0.1.116** (noted in step 5 of the Polycom Phone Configuration procedure) into the **Address** field under **Paging Groups**.

7. Determining the port number requires a bit of math. When Polycom paging is enabled in the V3 Paging Server configuration, the V3 Paging Server will send a Polycom multicast page to the specified paging group address and [port number+1]. This allows the V3 Paging Server to maintain conformance with RFC 1889 for standard multicast transmissions while also supporting Polycom's proprietary paging protocol.

So, enter the number **5000** into the *Port* field under Paging Groups for your desired paging group. Note that the configured port number 5000 is the next lower even-numbered port from port number 5001 used by the Polycom phones.

8. Be sure to click **Save** and **Reboot** to store changes.