CyberData Corporation

VoIP Paging/Loudspeaker Amplifier Configuration Guide

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Tech Note

CyberData VoIP Paging Amplifier Configuration Guide

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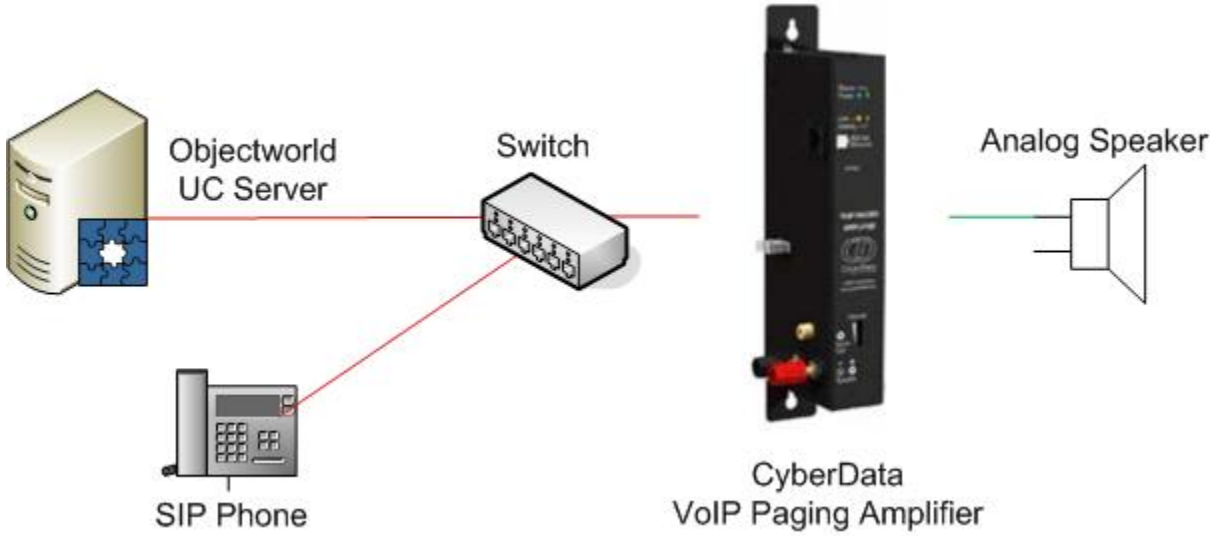
1 Introduction

The CyberData SIP-enabled VoIP Paging Amplifier provides an easy method for implementing an IP-based overhead paging system for both new and legacy installations. The amplifier provides direct drive of a standard horn speaker and supports a line-out connector for an external amplifier. The purpose of this guide is to provide instructions on configuring the VoIP Paging Amplifier with UC Server.

1.1 Network Topology

Below is an example of how the CyberData VoIP Paging Amplifier might be configured in your network.



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2 Known Integration Issues

Known integration issues include:

- Cannot perform supervised transfers
    - Performing a supervised transfer to the paging speaker does not function properly and results in the transferrer indicating a successful transfer even though the transfer was not completed.

3 Preparation

This section provides instructions about how to apply firmware updates (if necessary) and how to set up the device for manual configuration.

3.1 PC Network Settings

The factory default on CyberData products is a static IP address. To access the device, you must change your PC to the same address range.

To change the IP Address for your computer, do the following:

NOTE: Make a note of your original network settings before making any changes because you need to change these settings back after changing the network configuration on the speaker.

For **Windows Server 2003/XP**

1. Click Windows **Start**.
2. Click **Control Panel**.
3. If you have the classic view, click **Network Connections**.
   If you have the category view, click **Network and Internet Connections**, and then click **Network Connections**.
4. Double-click the active **LAN or Internet connection**.
5. Click **Properties**.
6. In the **General** tab, highlight the **Internet Protocol (TCP/IP)** item, and click **Properties**.
7. In the **General** tab, click **Use the following IP address**, and enter:
   IP Address: 192.168.3.1
   Subnet Mask: 255.255.255.0
   Default Gateway: 192.168.3.10
8. Click **OK**.

For **Windows Server 2008/Windows Vista**

1. Click Windows **Start**.
2. Click **Control Panel**.
3. If you have the classic view, click **Network and Sharing Center** and then click **Manage Network Connections.**
   If you have the category view, click **Network and Internet, View network status and tasks** and then click **Manage Network Connections**.
4. Double-click the active **LAN or Internet connection**.
5. Click **Properties**.
6. In the **Networking** tab, highlight the **Internet Protocol (TCP/IP)** item, and click **Properties**.
7. In the **General** tab, click **Use the following IP address**, and enter:
   IP Address: 192.168.3.1
   Subnet Mask: 255.255.255.0
   Default Gateway: 192.168.3.10
8. Click **OK**.

3.2 CyberData VoIP Paging Amplifier Network Settings

The VoIP Paging Amplifier is configured with a static IP address on factory default. This must be changed so that the device is connected to your network.

To enter network settings for CyberData VoIP Paging Amplifier

1. Open your browser and type the IP Address of the speaker. The factory default is 192.168.3.10.
2. When prompted, use the following default Web Access username and password:
   - Web Access Username: ***admin***
   - Web Access Password: ***admin***
3. Click **Network Setup**.
4. Under **IP Addressing**, select **DHCP**.
5. Click **Save Settings.**

3.3 Upgrading the firmware

Refer to the Technical Note "TN051 – SIP Device Features and Comparisons" (a versioned document located on the Objectworld web site at www.objectworld.com/support/documentation) to determine the most recently supported version of firmware for the zone controller.

The factory firmware version can be found on the check-off list shipped with your device. If the firmware version on the device is earlier than the version noted in TN051, upgrade the firmware.

3.3.1 TFTP Firmware Upgrade

1. Retrieve the latest firmware from the CyberData web site. (www.cyberdata.net/support/voip/pagingamplifier)
2. Unzip the file to the Objectworld TFTP folder (located in: ***X*:\Program Files\Objectworld\UC Server\Data\TFTP** where ***X*** is the drive where the UC Server program files are installed).
3. Open your browser and type the IP Address of the Paging Amplifier.
4. When prompted, use the following default Web Access username and password:
   Web Access Username: ***admin***
   Web Access Password: ***admin***
5. Click the **Upgrade** button.
6. Enter the IP address of your UC Server in the TFTP **Server IP** field.
7. Under New Filename, enter the filename of the rom file you unzipped from the firmware zip file.
   For example: **400-romdisk-spk-sip.img**
8. Click **Upload File.**
9. After the rom image file finishes uploading, repeat step 6 but upload the image file by entering the filename of the image.
   For example: **400-image-spk-sip.bin**
10. Click **Upload File.**
11. Click the **reboot** button.

4 SIP Configuration

4.1 Gathering Information

To configure the device, you need the following information.

SIP User ID: This is equivalent to the identity address you want to associate with the device.

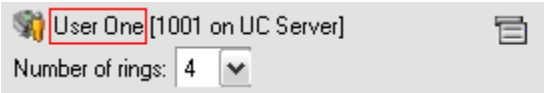
Authenticate ID: This is the SIP authentication identifier associated with the above identity. This is required by any SIP end-point to register with the SIP PBX.

Authenticate Password: This is the SIP authentication password associated with the above identity.

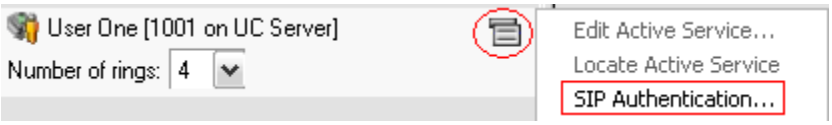
To determine the Authentication ID and Password, do the following:

4.1.1 Determining the Authentication ID and Password as the user (that owns the identity) in UC Client

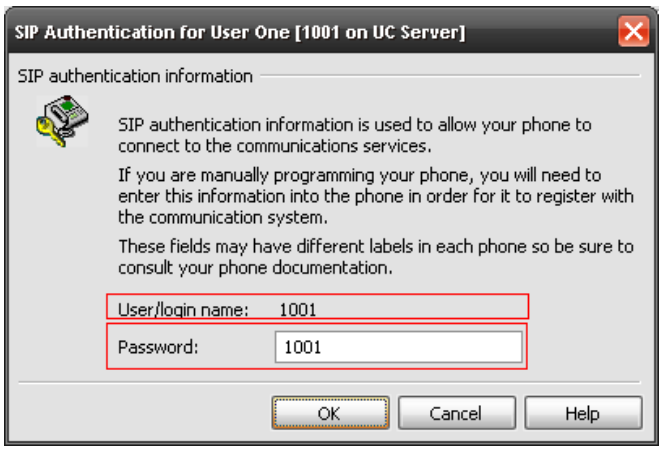
1. Start UC Client.
2. Login as the user you want to associate to the device.
3. In the bottom left pane, take note of the identity name.



4. Click the icon on the right and select **SIP Authentication**.



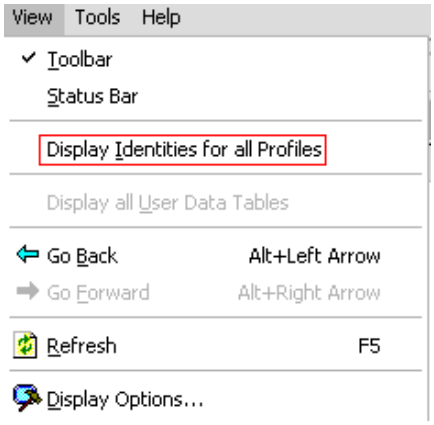
5. Record the User/login name and password from the following dialog because you will need it later to configure the device.



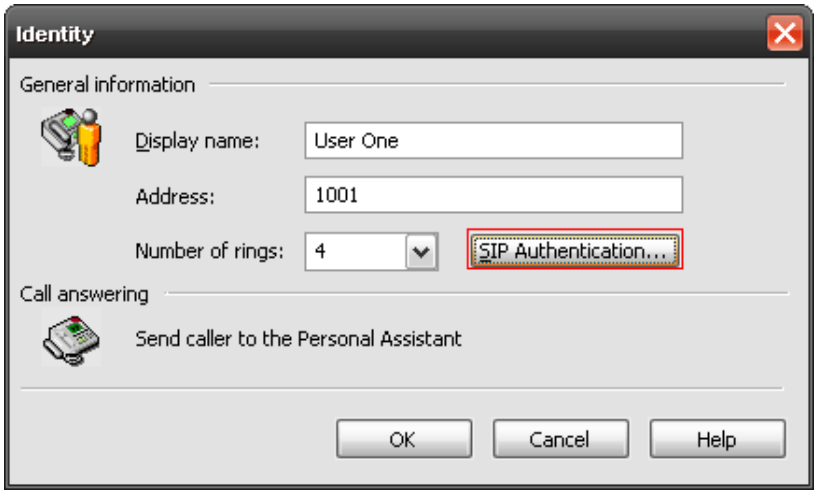
4.1.2 Determining the Authentication ID and Password as the administrator in UC Client

1. Start UC Client.

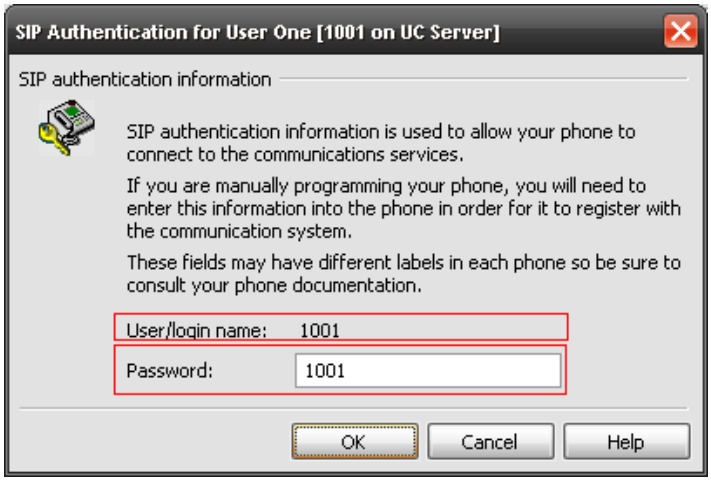
2. Login as the admin user.
3. Select the Identities tab in the left pane.
4. Go to View > Display identities for all Profiles.



5. Find the identity in the list that you want to use and double-click the entry.
6. Click **SIP Authentication**.



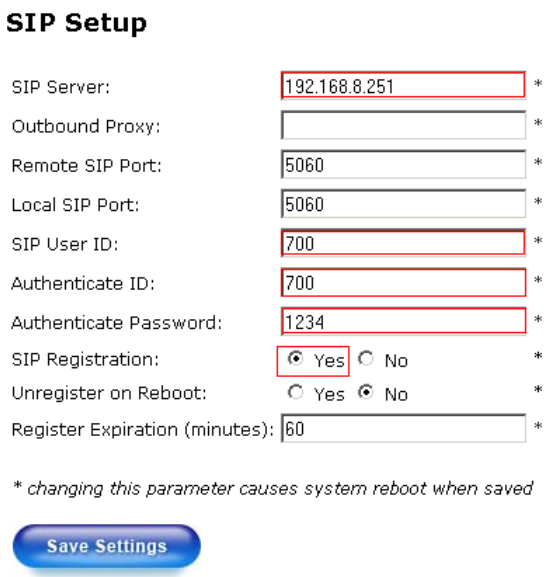
7. Record the User/login name and password from the following dialog because you will need it later to configure the device.



4.2 Device Configuration

1. Open your browser and type the IP Address of the Paging Amplifier.
2. When prompted, use the following default Web Access username and password:
   Web Access Username: ***admin***
   Web Access Password: ***admin***
3. Click the **SIP Setup** button.
4. Enter the following information:
   SIP Server: <IP Address of UC Server>
   SIP User ID: <SIP User ID>
   SIP Authenticate ID: <SIP User ID>
   SIP Password: <Authenticate Password>
   SIP Registration: Yes
5. Click **Save Settings**.

The figure below shows an example of how to complete the required fields.



5 Troubleshooting

1. **You receive a voicemail prompt when dialing the identity of the device.**

   Verify the following:
   - The identity was created in UC Server and the correct User ID and password are configured on the device
     - See section 4
   - The SIP Server address on the device is set to the correct IP Address of UC Server
     - See section 4.2
   - SIP Registration is enabled on the device
     - See section 4.2

2. **You are unable to access the Web interface to configure the paging device.**

   Verify the following:
   - Your PC is set to the same address range as the device for first time configuration.
     - See section 3.1

3. **No audio when calling into paging device.**

   Verify the following:
   - The volume level is set correctly on the speaker.

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