

[AN038]



ADVANCED
NETWORK DEVICES

Paging Message Interrupt

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Static Electric Warning



TROUBLESHOOTING AND ADDITIONAL RESOURCES

Complete Support Site with User Guides & Help: <http://www.anetdsupport.com/>
Additional App Notes: <http://www.anetdsupport.com/AppNotes>
Customer Feedback Survey: <http://www.anetdsupport.com/survey>
AND Legal Disclaimer: <http://www.anetd.com/legal>

OVERVIEW

This application note describes how to set up a continuous scrolling message that will pause for the duration of an audio page and then automatically resume. This solution utilizes the IPClockWise software, which you can get through our Customer Portal: <http://www.anetd.com/portal/>

Click on the link to *Sign Up* and create your personal account. Once approved and logged in to the portal, you will find a link to download the latest version of IPClockWise. Please refer to the remainder of this documentation for more details on setup.

This document assumes that you are using a configuration file to administer to AND Endpoints.

CONFIGURING THE AND DEVICE

Configure the AND device to activate a GPIO output during an audio page. Add the following lines between the opening and closing XML tags of your configuration file:

```
<Priorities >  
  <action priority="50" gpio0="1" />  
</Priorities>
```

Make sure the priority for sending the audio page matches the *action priority* value, in this case "50".

The device will send out an SNMP trap when the GPIO output changes state by adding the following lines to the config file:

```
<GPIO snmp_trap_for_output_gpio0="1" />
```

Configure the device to register with the computer where you will install IPClockWise, as well as to send the SNMP traps to that same computer. Define the *server registration* and *SNMP Trap Manager* by adding these lines to the configuration file:

```
<Servers>  
  <AND_Exempt url="http://10.10.7.10:8089/" />  
</Servers>  
<SNMP>  
  <TrapManager  
    addr="10.10.7.10"  
    pdu_version="2"  
    community="public"  
  />  
</SNMP>
```

Make sure that the *url* and *addr* values match the IP address of the PC running IPClockWise. Ideally, configure with a static address to avoid having to change these values in the future.

Please note that all AND endpoints will require a reboot to apply all the changes in this section.

SETTING UP IPCLOCKWISE

Install the IPClockWise software by running the executable obtained from our Customer Portal. Complete the steps, and launch the program using the shortcut on the desktop. Provided the configuration enables multicast traffic between the AND devices and IPClockWise, the Endpoints List should automatically populate in the display when the program launches.

Add a Group Endpoint that contains all the AND devices you want to receive the scrolling text message. This Group should match your paging group within the third-party application (e.g. SA-Announce). Follow these steps:

1. Click on the *Add New Endpoint* button above the **Endpoint list** and choose *Add Group Endpoint*.
2. Name your Group, and place check marks next to all the desired devices. (Note that if you use the *Check All* feature, ensure that you manually remove PC Speakers, as this setting may cause issues later).
3. Click *OK* to save, and your Group will now appear within the **Endpoint list**.

Go to the **Alerts** Tab along the top, and click on *Add an Alert* to add the following alerts, which will control the scrolling message behavior. In the examples provided, the highlighted fields indicate what needs to change for both alerts.

Scrolling Text Message Pause on GPIO Output Set

This Alert will deactivate the scrolling text when the device receives an audio page.

Custom Stream: None

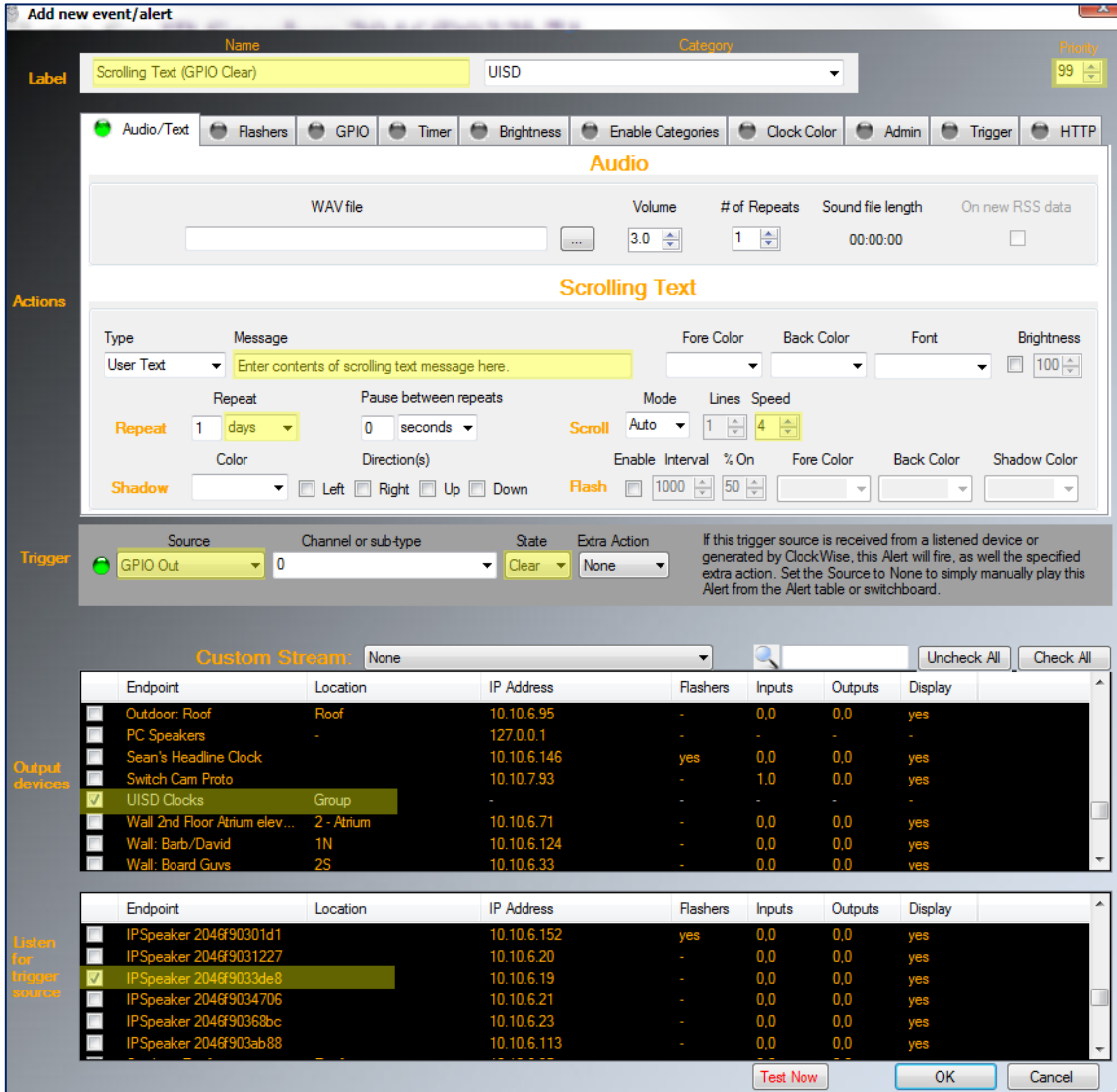
Endpoint	Location	IP Address	Flashers	Inputs	Outputs	Display	
<input type="checkbox"/>	PC Speakers	127.0.0.1	-	-	-	-	
<input type="checkbox"/>	Sean's Headline Clock	10.10.6.131	yes	0.0	0.0	yes	
<input type="checkbox"/>	Switch Cam Proto	10.10.7.93	-	1.0	0.0	yes	
<input checked="" type="checkbox"/>	UISD Clocks Group	-	-	-	-	-	
<input type="checkbox"/>	Wall 2nd Floor Atrium elev...	2 - Atrium	10.10.6.71	0.0	0.0	yes	
<input type="checkbox"/>	Wall: Barb/David	1N	10.10.6.124	0.0	0.0	yes	
<input type="checkbox"/>	Wall: Board Guys	2S	10.10.6.33	0.0	0.0	yes	
<input type="checkbox"/>	Wall: Brian's office	2N - Brian's Office	10.10.6.100	yes	0.0	0.0	yes

Endpoint	Location	IP Address	Flashers	Inputs	Outputs	Display	
<input type="checkbox"/>	IP Camera Lobby	1 - Atrium	10.10.6.86	yes	0.0	0.0	yes
<input type="checkbox"/>	IPSpeaker 2046f90301d1	10.10.6.152	yes	0.0	0.0	yes	
<input type="checkbox"/>	IPSpeaker 2046f9031227	10.10.6.20	-	0.0	0.0	yes	
<input checked="" type="checkbox"/>	IPSpeaker 2046f9033de8	10.10.6.19	-	0.0	0.0	yes	
<input type="checkbox"/>	IPSpeaker 2046f9034706	10.10.6.21	-	0.0	0.0	yes	
<input type="checkbox"/>	IPSpeaker 2046f90368bc	10.10.6.23	-	0.0	0.0	yes	

- Set *Label* to "Scrolling Pause".
- Set the *Priority* to "99".
- In the *Actions* section, place a single "space" in the Message field (essentially counts as "blank").
- Increase the *Speed* value to "10".
- For the *Source* list, choose "GPIO Out".
- Ensure the *State* is "Set".
- Select your Group endpoint created above in the *Output devices* section.
- Select any one of the endpoints included in the Group endpoint as the *Listen for trigger source*.

Scrolling Text Message on GPIO Output Clear

This Alert will activate when the audio page ends, resuming the scrolling text on your displays.



The screenshot shows the 'Add new event/alert' configuration window. The 'Label' is 'Scrolling Text (GPIO Clear)' and the 'Category' is 'UISD'. The 'Priority' is set to '99'. Under the 'Audio' section, the 'WAV file' is empty, 'Volume' is 3.0, and '# of Repeats' is 1. The 'Scrolling Text' section is configured with 'Type' as 'Message', 'User Text' as 'Enter contents of scrolling text message here.', 'Repeat' as 1 day, 'Pause between repeats' as 0 seconds, 'Mode' as 'Auto', 'Lines' as 1, and 'Speed' as 4. The 'Trigger' section is set to 'GPIO Out' with 'State' as 'Clear' and 'Extra Action' as 'None'. Below the configuration, there are two tables: 'Output devices' and 'Listen for trigger source'. The 'Output devices' table has columns for Endpoint, Location, IP Address, Flashers, Inputs, Outputs, and Display. The 'Listen for trigger source' table has columns for Endpoint, Location, IP Address, Flashers, Inputs, Outputs, and Display.

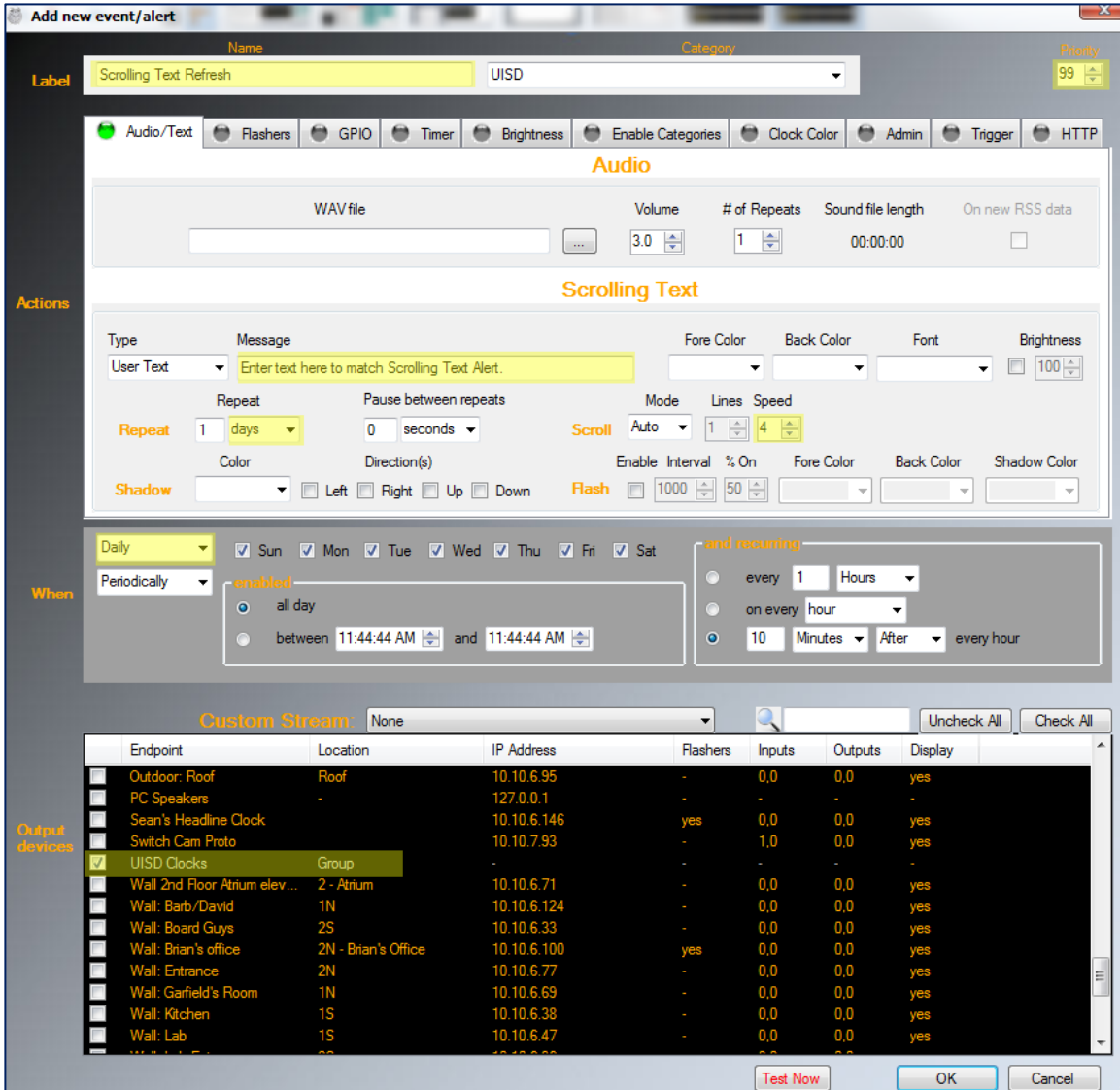
Endpoint	Location	IP Address	Flashers	Inputs	Outputs	Display
Outdoor: Roof	Roof	10.10.6.95	-	0.0	0.0	yes
PC Speakers	-	127.0.0.1	-	-	-	-
Sean's Headline Clock	-	10.10.6.146	yes	0.0	0.0	yes
Switch Cam Proto	-	10.10.7.93	-	1.0	0.0	yes
UISD Clocks	Group	-	-	-	-	-
Wall 2nd Floor Atrium elev...	2 - Atrium	10.10.6.71	-	0.0	0.0	yes
Wall: Barb/David	1N	10.10.6.124	-	0.0	0.0	yes
Wall: Board Guvs	2S	10.10.6.33	-	0.0	0.0	yes

Endpoint	Location	IP Address	Flashers	Inputs	Outputs	Display
IPSpeaker 2046f90301d1	-	10.10.6.152	yes	0.0	0.0	yes
IPSpeaker 2046f9031227	-	10.10.6.20	-	0.0	0.0	yes
IPSpeaker 2046f9033de8	-	10.10.6.19	-	0.0	0.0	yes
IPSpeaker 2046f9034706	-	10.10.6.21	-	0.0	0.0	yes
IPSpeaker 2046f90368bc	-	10.10.6.23	-	0.0	0.0	yes
IPSpeaker 2046f903ab88	-	10.10.6.113	-	0.0	0.0	yes

- Set *Label* to "Scrolling Text".
- Set the *Priority* as "99".
- In the *Actions* section, enter the text in the *Message* field.
- As the *Repeat time frame*, select "days".
- Change the *Speed* value if desired or leave as default "6".
- In the *Source* list, choose "GPIO Out".
- Ensure the *State* is "Clear".
- Select your Group endpoint created above in the *Output devices* section.
- Select any one of the endpoints included in the Group endpoint as the *Listen for trigger source*.

Scrolling Text Refresh

After creating these two alerts, go to the **Events** Tab, and click *Add an Event* to add this event to IPClockWise, which will reactivate the scrolling text message after interruptions other than a page.



Add new event/alert

Label Name: Scrolling Text Refresh Category: UISD Priority: 99

Actions

Audio/Text (selected) | Flashers | GPIO | Timer | Brightness | Enable Categories | Clock Color | Admin | Trigger | HTTP

Audio

WAV file: [] Volume: 3.0 # of Repeats: 1 Sound file length: 00:00:00 On new RSS data:

Scrolling Text

Type: User Text Message: Enter text here to match Scrolling Text Alert. Fore Color: [] Back Color: [] Font: [] Brightness: 100

Repeat: 1 days Pause between repeats: 0 seconds Mode: Scroll Lines: 4 Speed: 6

Color: [] Direction(s): Left Right Up Down Flash: 1000 50 Fore Color: [] Back Color: [] Shadow Color: []

When

Daily (selected) | Periodically | enabled

Sun Mon Tue Wed Thu Fri Sat

all day between 11:44:44 AM and 11:44:44 AM and recurring

every 1 Hours on every hour 10 Minutes After every hour

Output devices

Custom Stream: None Uncheck All Check All

Endpoint	Location	IP Address	Flashers	Inputs	Outputs	Display
<input type="checkbox"/> Outdoor: Roof	Roof	10.10.6.95	-	0.0	0.0	yes
<input type="checkbox"/> PC Speakers	-	127.0.0.1	-	-	-	-
<input type="checkbox"/> Sean's Headline Clock	-	10.10.6.146	yes	0.0	0.0	yes
<input type="checkbox"/> Switch Cam Proto	-	10.10.7.93	-	1.0	0.0	yes
<input checked="" type="checkbox"/> UISD Clocks	Group	-	-	-	-	-
<input type="checkbox"/> Wall 2nd Floor Atrium elev...	2 - Atrium	10.10.6.71	-	0.0	0.0	yes
<input type="checkbox"/> Wall: Barb/David	1N	10.10.6.124	-	0.0	0.0	yes
<input type="checkbox"/> Wall: Board Guys	2S	10.10.6.33	-	0.0	0.0	yes
<input type="checkbox"/> Wall: Brian's office	2N - Brian's Office	10.10.6.100	yes	0.0	0.0	yes
<input type="checkbox"/> Wall: Entrance	2N	10.10.6.77	-	0.0	0.0	yes
<input type="checkbox"/> Wall: Garfield's Room	1N	10.10.6.69	-	0.0	0.0	yes
<input type="checkbox"/> Wall: Kitchen	1S	10.10.6.38	-	0.0	0.0	yes
<input type="checkbox"/> Wall: Lab	1S	10.10.6.47	-	0.0	0.0	yes

Test Now OK Cancel

- Set the *Label* as "Scrolling Text Refresh".
- Set the *Priority* as "99".
- In the *Actions* section, enter the text in the *Message* field to match the alert create above.
- Select the *Repeat time frame* as "days".
- Change the *Speed* value if desired or leave as default "6".
- In the *When* section, select "Daily" from the drop-down menu, and leave all settings as default.
- Select your Group endpoint created above in the *Output devices* section.

VERIFYING FUNCTIONALITY

Once completing all the above steps, ensure that IPClockWise remains open on the PC. Verify that the paging will interrupt the AND devices as intended.

1. Manually activate the Event created above by right-clicking on it in the Event list and choosing Run Now. You should immediately see the text begin scrolling on the targeted devices.
2. Send a page from an available third-party software to the selected AND devices. The scrolling text message should pause, and the time should display for the duration of the page.
3. Complete the page, and the scrolling text message should begin playing across the displays again.

If the scrolling message does not pause for the page, open the device status page of one of the AND devices, and check the dynamic streams section to see the priority of the audio broadcasting (as shown below).

```
o previously used stream (ix_sd=3)
  ■ dest: 239.2.2.4:7134 src: 10.10.7.10
  ■ started 2015/12/23 12:06:08 ended: 2015/12/23 12:06:22
  ■ pkts recvd: 691 vol: 3.000 prio:50
  ■ consec:690 non-consec:1 duplicate:0 ignored:0
  ■ 5ms arrival time bins: 0 0 0 35 655 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
```