



**ADVANCED**  
NETWORK DEVICES

## Hosting Configuration Files with IPClockWise

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### Static Electric Warning



## TROUBLESHOOTING AND ADDITIONAL RESOURCES

Complete Support Site with User Guides & Help: <http://www.anetd.com/user-support/>

Technical Resources: <http://www.anetd.com/user-support/technical-resources/>

AND Legal Disclaimer: <http://www.anetd.com/legal>

## OVERVIEW

For security and control, IPClockWise can host configuration files for all AND devices, which disables the web server options and prevents other users from changing settings on devices locally. These procedures require a minimum device Firmware version 1.5.0001.

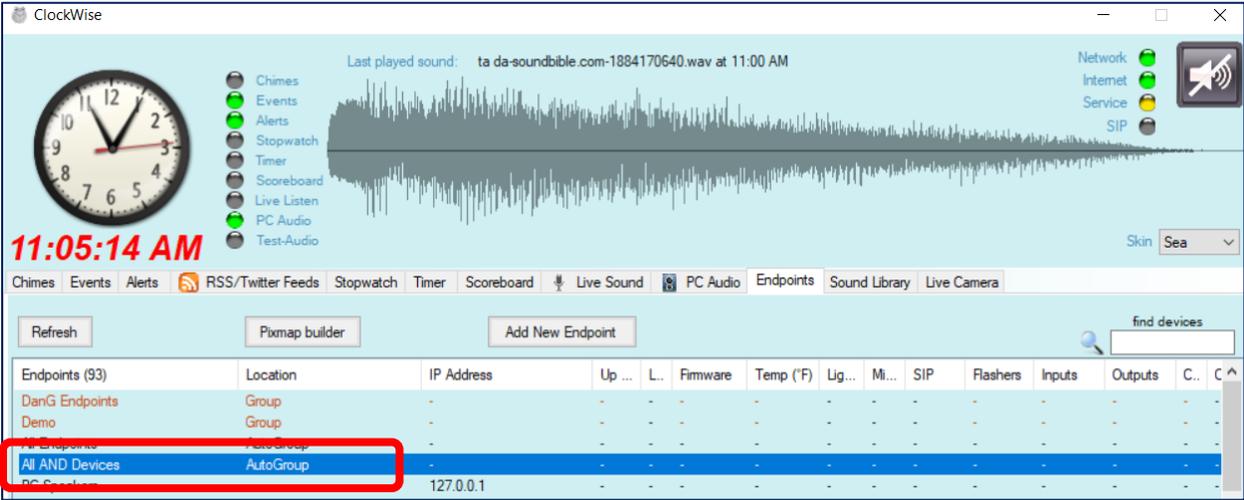
Advantages of using a configuration file:

- Control all device settings from a single location using only two configuration files on the IPClockWise server.
- Easy to change many device parameters at once.
- All the web interfaces become secured.

## SET UP CONFIGURATION FILES BASED ON CURRENT DEVICE SETTINGS

For an existing installation, if you have used the web interface to configure each device, you can follow these procedures to create configuration files based on your current device settings, and then serve them to the devices.

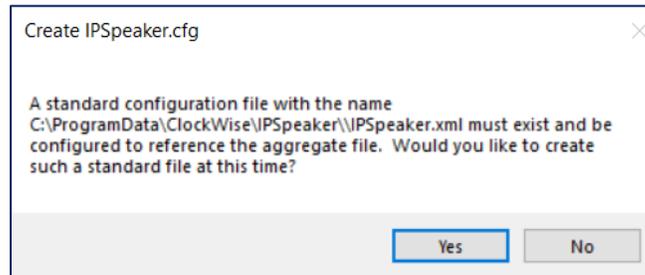
1. Navigate to your Endpoints tab, and find the group *All AND Devices* in the list.



The screenshot shows the IPClockWise web interface. At the top, there is a clock displaying 11:05:14 AM and a waveform visualization. Below the waveform, there are several tabs: Chimes, Events, Alerts, RSS/Twitter Feeds, Stopwatch, Timer, Scoreboard, Live Sound, PC Audio, Endpoints, Sound Library, and Live Camera. The 'Endpoints' tab is selected. Below the tabs, there is a table with columns: Endpoints (93), Location, IP Address, Up ..., L., Firmware, Temp (°F), Lig..., Mi..., SIP, Flashers, Inputs, Outputs, C., and C ^. The table contains several rows, and the 'All AND Devices' group is highlighted with a red box. The IP address for this group is 127.0.0.1.

2. Backup your current settings. Right-click on the *All AND Devices* group in the Endpoints list and select *Collect Full Status* → *Collect*. The process will create backup folders in your logs folder. (C:\Users\Public\Documents\ClockWise\Logs)
3. Create configuration files for your other devices. Right-click on the *All AND Devices* group in the Endpoints list and select *Extract Aggregate Config File*. Click "Yes" to create the files in the proper directory of IPClockWise. (C:\ProgramData\ClockWise\IPSpeaker)

*Note: If your drop-down menu shows the option as unavailable (grayed-out), then a device in the list may have dropped off the network, or one of the devices does not support this feature. You can still create an aggregate config file by creating a group and manually selecting endpoints to include in the aggregate config file.*

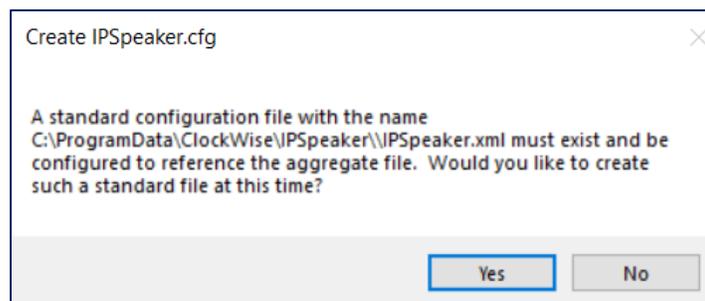


4. Right-click on the *All AND Devices* group in the Endpoints list and select *Serve Configuration File For Device*. Answer "Yes" or "No" depending on the stability of your IPClockWise machine's IP address. The devices will reboot automatically and get the new configuration files from the built-in HTTP server in IPClockWise.

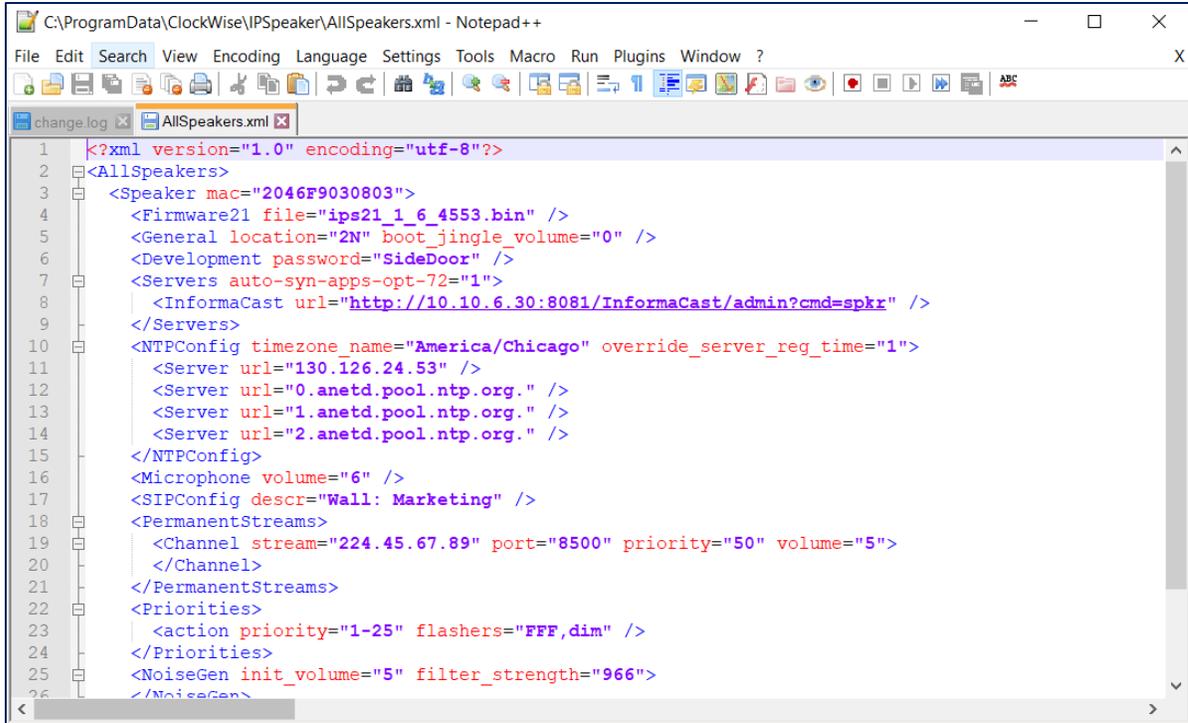
## SET UP CONFIGURATION FILES BY REPLICATING SINGLE DEVICE SETTINGS

For new installation, configure one device via the web server interface, extract the XML and replicate to other devices as follows:

1. Configure your model device using the web server interface.
2. Create configuration files for the model device. Right-click on the device you want to model in the Endpoints list, and select *Extract Aggregate Config File*. Click "Yes" to create the files in the proper directory of IPClockWise. (C:\ProgramData\ClockWise\IPSpeaker)



3. Open the created file AllSpeakers.xml in C:\ProgramData\IPSpeaker using an appropriate XML editor.



```
<?xml version="1.0" encoding="utf-8"?>
<AllSpeakers>
  <Speaker mac="2046F9030803">
    <Firmware21 file="ips21_1_6_4553.bin" />
    <General location="2N" boot_jingle_volume="0" />
    <Development password="SideDoor" />
    <Servers auto-syn-apps-opt-72="1">
      <InformaCast url="http://10.10.6.30:8081/InformaCast/admin?cmd=spkr" />
    </Servers>
    <NTPConfig timezone_name="America/Chicago" override_server_reg_time="1">
      <Server url="130.126.24.53" />
      <Server url="0.anetd.pool.ntp.org." />
      <Server url="1.anetd.pool.ntp.org." />
      <Server url="2.anetd.pool.ntp.org." />
    </NTPConfig>
    <Microphone volume="6" />
    <SIPConfig descr="Wall: Marketing" />
    <PermanentStreams>
      <Channel stream="224.45.67.89" port="8500" priority="50" volume="5">
      </Channel>
    </PermanentStreams>
    <Priorities>
      <action priority="1-25" flashers="FFF,dim" />
    </Priorities>
    <NoiseGen init_volume="5" filter_strength="966">
    </NoiseGen>
  </Speaker>
</AllSpeakers>
```

4. Duplicate the Speaker section of the code (see example below) for each device you want to adopt these settings. Be sure to update the parameters unique for each device, such as mac address, description, SIP configuration, location, etc.
5. Save your changes. Once you reboot these devices or connect them to the network, this file will configure their settings automatically.

## ADDING NEW ENDPOINTS AFTER INITIAL SETUP

Once IPClockWise serves configuration files, follow these steps to add new AND endpoints to the network.

1. Open the AllSpeakers.xml file.
2. Add a new IPSpeaker section. Select an existing IPSpeaker section, and copy and paste it below that section. Change the MAC address to match the new unit and any other settings specific to that device.
3. Plug the new endpoint into the network, and look for it to be discovered automatically by IPClockWise.

4. Right-click that new endpoint in the Endpoint(s) list. Choose *Serve Configuration Files for Device* (we recommend you select *No* to use the IPclockWise server IP, unless you know for sure that the hostname will be resolved to the device). The endpoint will reboot and apply the settings from the configuration file.
5. Verify this process by viewing the **Device Settings → Configuration Information (/config)** page of the new device. Ensure it successfully retrieves the configuration file and also parses the aggregate file.

## Configuration Files IPSpeaker Section Example

```
<Speaker mac="2046F9xxxxxx">
  <Firmware21 file="ips21_1_6_0004.bin" />
  <General location="North Wing" />
  <Development password="SideDoor" />
  <Servers auto-syn-apps-opt-72="1">
    <AND_Exempt url="http://10.10.6.30:8089/" />
  </Servers>
  <NTPConfig timezone_name="America/Chicago" >
    <Server url="0.anetd.pool.ntp.org." />
    <Server url="1.anetd.pool.ntp.org." />
    <Server url="2.anetd.pool.ntp.org." />
  </NTPConfig>
  <Microphone volume="6" />
  <SIPConfig descr="Office Small IP Display" />
  <PermanentStreams>
    <Channel stream="232.9.10.11" port="23456" priority="50" volume="5">
      </Channel>
    </PermanentStreams>
  <Priorities>
    <action priority="1-25" flashers="FFF,dim" />
  </Priorities>
</Speaker>
```