[AN003]

ADVANCED NETWORK DEVICES

Add an AND Device as a SIP Device in Call Manager

Version 2.1

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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

CISCO UNIFIED CALL MANAGER (CUCM) SETUP

1. Log into CUCM web interface.

2. Create an End User account.
   a. Under the *User Management* menu, select *End User*.
   b. Click the *Add New* button, and enter End User information

User ID	Create a user name (e.g., `Dan`)
Password	Enter and confirm
PIN	Enter and confirm (Matches the *Password*)
Last Name	User last name

   c. Click the *Save* button.

3. Create a new phone entry for your device.
   a. Under the *Device* menu, select *Phone*.
   b. Click the *Add New* button.
   c. Select *Phone Type* as `Third-party SIP device (Basic)`, then click *Next*.
   d. Select the *Is Active* checkbox, if present.
   e. Enter the following information:

AND Device MAC address	e.g., `2046F9010203`
Device Pool	`Default`
Phone Button Template	`Third-party SIP device (Basic)`
Owner User ID	User ID (previously created, e.g., `Dan`)
Device Security Profile	`Third-party SIP device Basic – Standard SIP Non-secure Profile`
SIP Profile	`Standard SIP Profile`
Digest User	User ID (previously created, e.g., `Dan`)

   f. Click the *Save* button.

4. Assign a directory number.
   a. At the left side of the newly created *Phone*, select the *Line [1] – Add a new DN* link.
   b. Add a *Directory Number* (e.g., `7003`).
   c. Click the *Save* button.

5. Verify the Phone License Feature has units remaining (Select **System** ➔ **Licensing** ➔ **License Unit Report***).* Each SIP device requires three units.

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AND DEVICE SETUP

Option 1 – Configuration via AND Device Web Page

1. On the AND device's web page, select **Device Settings → SIP**.

2. Enter the following information:

Extension	Match the *Directory Number* used in the *Phone* device (e.g., `7003`)
SIP Server	Match the IP address of the CUCM server
SIP Domain	Leave blank
SIP Password	Match the password entered in the *End User* profile
SIP Digest Username	Match the *Digest User* entered in the *Phone* device (e.g., `Dan`)

3. If using the optional push-button to generate a callback to another SIP device, set the *Push-To-Talk 1* to the extension of the line to ring when the button is pressed. Alternately, you can specify the MAC address or IP address of another AND device instead of an extension.
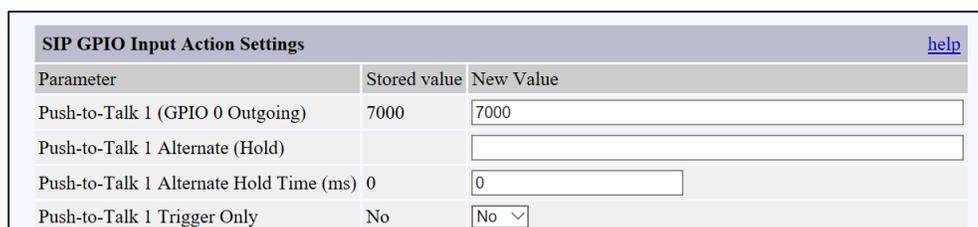
4. Click the *Save SIP Changes* button.

5. Reboot the device to begin using the new settings.

IPclockwise

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Option 2 – Configuration via Hosted Settings File

Global Configuration File Option

1. Edit the global configuration file (e.g., *IPSpeaker.cfg* or *InformaCastSpeaker.cfg*) to set the IP address of the CUCM server and point to the aggregate speaker configuration file that will contain the specific SIP information for each AND device on the network:

SIP_server_addr	CUCM server IP address
AggregateSpeakerConfigFile	File containing device-specific information

Example excerpt from IPSpeaker.cfg:

```
<SIPConfig
  SIP_server_addr="10.10.7.168"
/>
<AggregateSpeakerConfigFile file="AllSpeakers.cfg" />
```

2. Edit the aggregate speaker configuration file (e.g., *AllSpeakers.cfg)* to set the specific SIP information for each AND device on the network:

id	Match the *Directory Number* entered in the *Phone* device (e.g., `7003`)
password	Match the password entered in the *End User* profile
digest_username	Match the *Digest User* entered in the *Phone* device (e.g., `Dan`)
push_to_talk_ip1	(optional) If using the push-button to generate a callback to another SIP device, set this parameter to the extension of the line to ring when the button is pressed. Alternately, you can specify the MAC address or IP address of another AND device instead of an extension.

Example excerpt from AllSpeakers.cfg:

```
<AllSpeakers>
  <Speaker mac="2046f9010203">
    <SIPConfig
      id="7003"
      password="password123"
      digest_username="Dan"
      push_to_talk_ip1="7000"
    />
  </Speaker>
</AllSpeakers>
```

3. Reboot the AND device to begin using the new settings.

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MAC-Specific File Option

1. Edit the AND device's specific configuration file, *IPSpeaker2046f9010203.cfg*, where 2046f9010203 is the MAC address of the device to configure.

2. In the *SIPConfig* tag, set the following parameters:

id	Match the *Directory Number* entered in the *Phone* device (e.g., `7003`)
SIP_server_addr	CUCM server IP address
password	Match the password entered in the *End User* profile
digest_username	Match the *Digest User* entered in the *Phone* device (e.g., `Dan`)
push_to_talk_ip1	(optional) If using the push-button to generate a callback to another SIP device, set this parameter to the extension of the line to ring when the button is pressed. Alternately, you can specify the MAC address or IP address of another AND device instead of an extension.

3. Reboot the AND device to begin using the new settings.

Example excerpt from IPSpeaker2046f9010203.cfg:

```
<IPSpeakerConfiguration>
…
<SIPConfig
   id="7003"
   SIP_server_addr="10.10.7.168"
   password="password123"
   digest_username="Dan"
   push_to_talk_ip1="7000"
/>
…
</IPSpeakerConfiguration>
```

OPERATION

The AND device should register with CUCM as a SIP device. Confirm this via the *SIP Status* section of the *SIP Status Page,* accessible from the device's web page.