

Yes, you can test your solution without obtaining a phone number, though there are some limitations depending on the features you need to verify. Assuming your solution uses Azure Communication Services (ACS), which supports telephony, chat, SMS, and VoIP, there are alternative methods to test voice interactions without a traditional phone number. Below, I'll outline your options and provide guidance on how to proceed with your proof of concept (POC).

Options for Testing Without a Phone Number

1. VoIP Testing Using SIP Clients

- **What it is:** ACS supports Voice over IP (VoIP) calls, which can be tested using SIP clients or softphones (e.g., Linphone, Zoiper) without a phone number.
- **How to do it:**
 1. In your ACS resource, go to **Settings > SIP Signaling** and generate SIP credentials.
 2. Download a SIP client (e.g., Linphone or Zoiper) and install it on two devices (e.g., your computer and a mobile device).
 3. Configure each client with the SIP credentials from ACS.
 4. Use one client to call the other and test your solution's voice interaction (e.g., with a bot handling the call).
- **Best for:** Testing voice features like speech-to-text and text-to-speech.
- **Limitations:** This won't simulate PSTN (traditional phone network) calls, which require a phone number.

2. Web-based Testing with WebRTC

- **What it is:** ACS supports WebRTC, allowing browser-based voice and video calls without a phone number.

without a phone number.

- **How to do it:**

1. Use the ACS Web JavaScript SDK to build a simple web app for making and receiving VoIP calls. Sample code is available in the [ACS documentation](#).
2. Open the app in two browser windows (or on different devices).
3. Initiate a call and test your solution's functionality.

- **Best for:** Testing voice interactions in a browser-based environment.

- **Limitations:** Like SIP testing, this is VoIP-only and doesn't mimic PSTN calls.

3 Internal Chat or Messaging

- **What it is:** If your solution includes chat features, you can test them using ACS's chat capabilities without a phone number.
 - **How to do it:** Use the ACS Chat SDK to send and receive messages between users or a bot.
 - **Best for:** Testing non-voice features like messaging or data collection.
 - **Limitations:** This doesn't cover voice interactions.
-

Recommended Approach for Your POC

If your solution involves voice interactions (e.g., a bot using speech-to-text and text-to-speech), **VoIP testing with SIP clients** or **WebRTC-based testing** are the most practical options. Here's a step-by-step guide for each:

Option 1: VoIP Testing with SIP Clients

1. **Generate SIP Credentials:** In your ACS resource, navigate to **SIP Signaling** settings and create credentials.
2. **Set Up SIP Clients:** Install a SIP client like Linphone on two devices and configure them

with your ACS SIP credentials.

3 **Test the Call:**

- Call from one client to the other.
- If your solution includes a bot, ensure it's connected to ACS to handle the call.
- Speak into the client and verify the bot's responses (e.g., collecting data and responding via text-to-speech).

4 **Validate Functionality:** Confirm that all components (e.g., API calls, data processing) work as expected.

Option 2: Web-based Testing with WebRTC

1 **Create a Web App:** Use the ACS Web JavaScript SDK to build a basic app for VoIP calls (refer to the ACS quickstart guide linked above).

2 **Connect to Your Solution:** Integrate the app with your bot or backend logic.

3 **Test the Interaction:**

- Open the app in two browser instances.
- Make a call and test the voice interaction end-to-end.

4 **Verify Results:** Ensure the conversation flow and any integrated features function correctly.

Limitations to Consider

- **No PSTN Testing:** These methods use VoIP, so they won't replicate traditional phone call scenarios. For a POC focused on voice logic, this is usually sufficient.
 - **Equipment:** You'll need a good microphone and speakers for accurate speech recognition and clear audio output.
 - **User Experience:** Testing with SIP clients or web apps may differ slightly from a phone call experience, but it's close enough for development purposes.
-

Final Thoughts

You can absolutely test your solution without a phone number using VoIP or WebRTC

methods. These approaches let you validate key functionality—like voice interactions, bot logic, and integrations—without additional costs or setup. For a complete telephony experience (e.g., PSTN calls), you'd eventually need a phone number, but for now, these options should meet your POC needs. Let me know if you need help setting up either method!