AIFrontDesk Pro
Customer Guide

Welcome to AIFrontDesk Pro

Get Started

Build Your First AI Call Agent in 5 Minutes

Step-by-step guide to create, test, and deploy your first AI call agent with **AIFrontDesk Pro**

Overview

AIFrontDesk Pro is a platform for building, testing, and deploying intelligent **AI call agents** that can handle natural, human-like conversations with your customers.

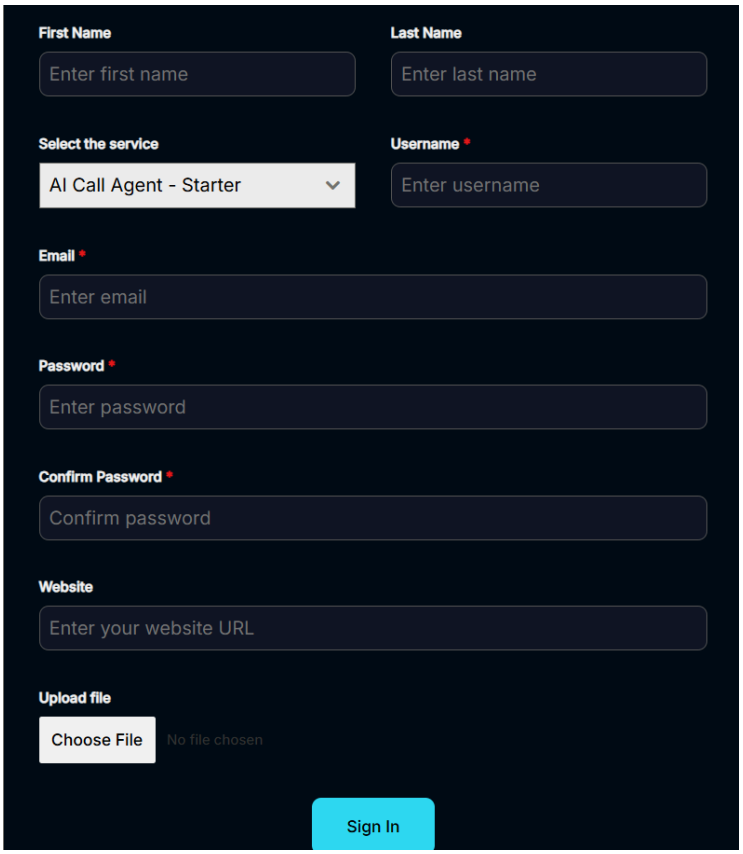
This quickstart guide will walk you through:

- Choosing your plan and starting a free trial
- Submitting your business and knowledge base information
- Creating and testing your first AI agent
- Deploying it to a real phone number
- Making your first AI-powered call

Step 1: Choose a Plan and Start Your Free Trial

1. Go to AIFrontDesk Pro Pricing & Plans
2. Choose the plan that fits your needs (e.g., **AI Call Agent – Starter**)
3. Click **Start Free Trial** to begin the setup process

You'll then see a registration form like this:



Fill in all required fields:

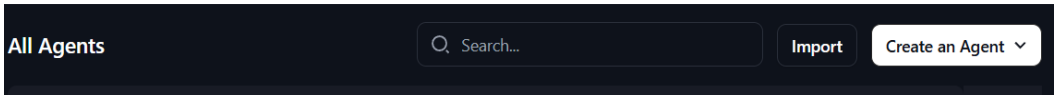
- **First Name / Last Name** – Your personal or business contact name
- **Select the Service** – Choose the AI Call Agent plan you want (e.g., Starter, Pro, or Enterprise)
- **Username** – Create a unique username for your dashboard login
- **Email** – Used for login and notifications
- **Password / Confirm Password** – Set a secure password
- **Website URL** – Your business website (used to build your agent's knowledge base)
- **Upload File** – Optionally upload PDFs, FAQs, or manuals to help train your AI agent

Once completed, click **Sign In** to submit your setup details.

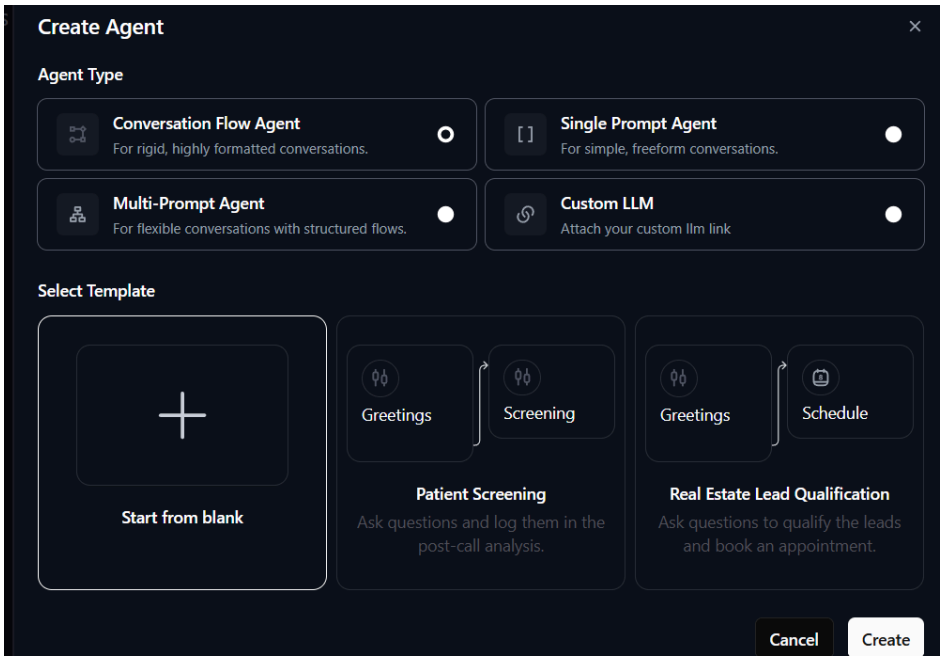
💡 **Tip:** The uploaded files and your website URL are used to teach your AI agent about your products, services, and business tone.

Step 2: Create a New Agent

1. From the main dashboard, navigate to the **Agents** tab
2. Click **Create New Agent**
3. Select "**Voice Agent**" as the agent type



4. Choose a template that matches your business type or use case

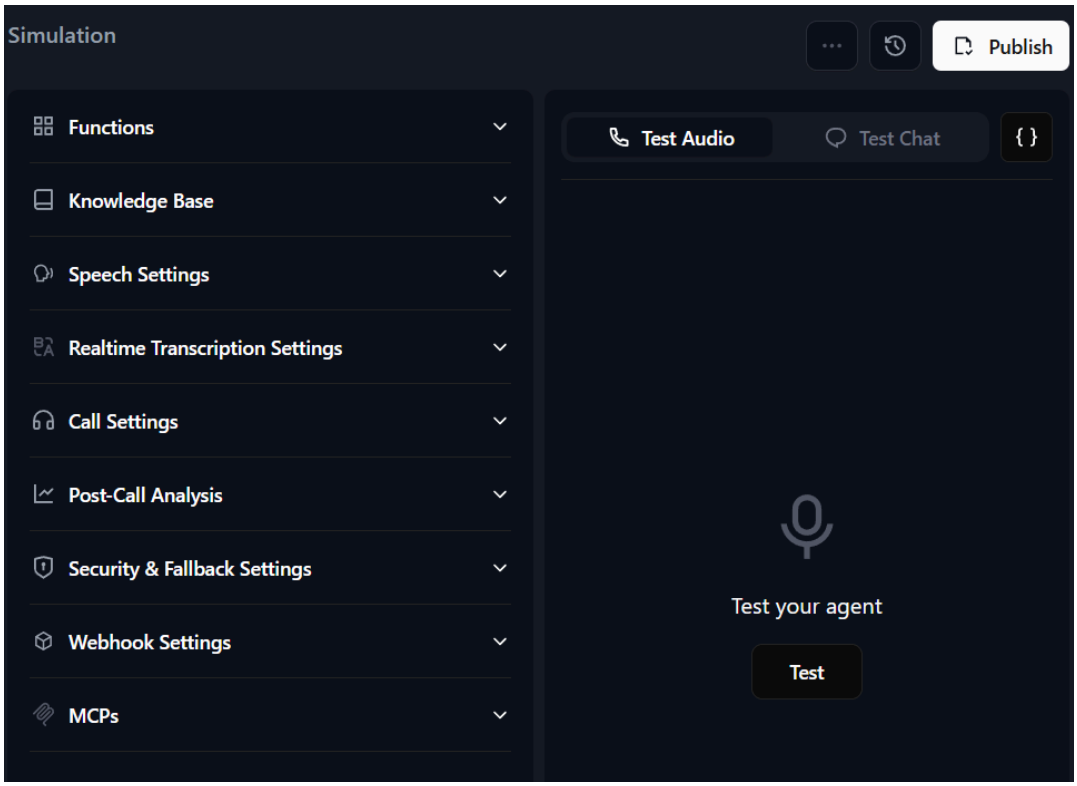


5. Configure your agent settings and prompts
6. Name your agent and add an optional description

💡 **Tip:** Templates come preloaded with conversation flows and intents to help you get started fast.

Step 3: Test Your Agent

1. Click the **Test** button on your agent's page
2. Use the built-in **web call simulator** to interact with your AI agent in real time



3. Adjust your prompts, tone, or logic based on the results

   🧠 Your AI agent learns dynamically from your settings — tweak and test until you get the perfect conversation style.

Step 4: Add Your Payment Method

Before purchasing or assigning a phone number, you'll need to add a payment method.

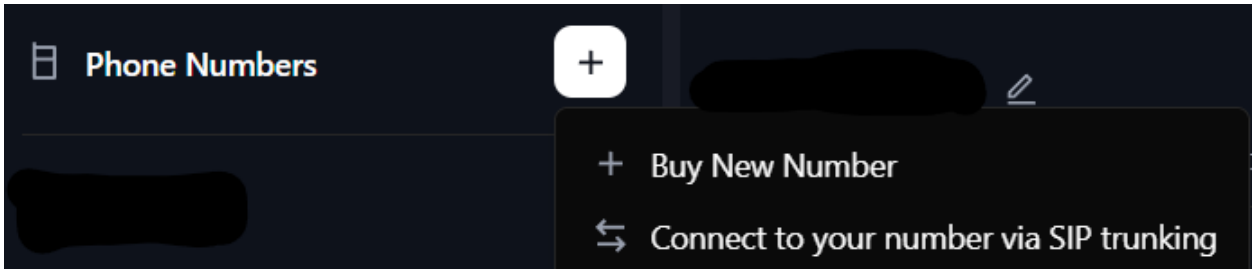
1. Go to the **Billing** tab
2. Click **Manage Payment Methods**

3. Add your preferred credit or debit card

🔒 All payments are securely processed through our verified payment partner.

Step 5: Deploy to a Phone Number

1. Navigate to the **Phone Numbers** tab
2. Click **Buy New Number**
3. (Optional) Enter an area code to search for local numbers
4. Purchase your number
5. Assign your AI agent to the number under **Number Settings**



🌍 You can also connect an existing business number through our integration options. (Twilio - via SIP trunking)

Step 6: Test Your Phone Agent

For Incoming Calls:

1. Dial your purchased number
2. Speak naturally — your AI agent will handle the call

For Outbound Calls:

1. Click **Make an Outbound Call**
2. Enter a valid number with the country code (e.g., +14155552671)
3. Monitor the conversation through your **Live Call Dashboard**

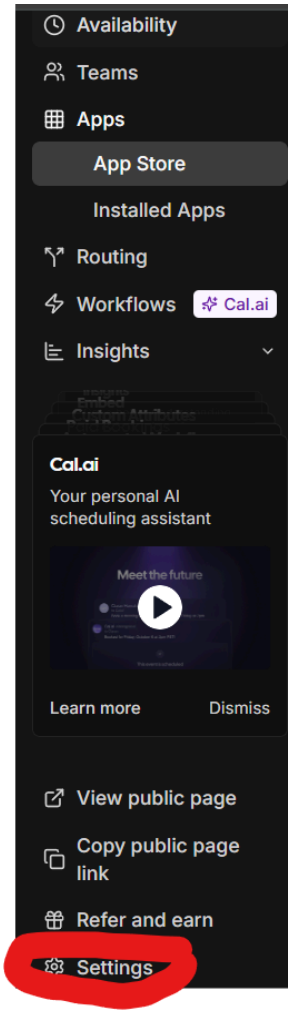
Step 7: Connecting Your Calendar via Cal.com for Appointment Scheduling

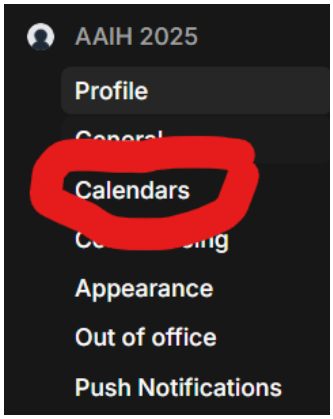
1. Create a Cal.com Account
   - Visit [Cal.com] and sign up using your preferred email address.

2. Verify Your Email
    - After signing up, check your inbox for a verification email from Cal.com.
    - Click the verification link to activate your account.

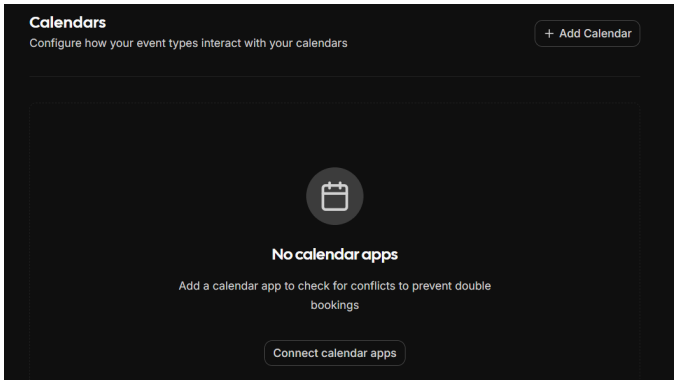
3. Log In to Cal.com
    - Once verified, go to [Cal.com] and sign in using your credentials.

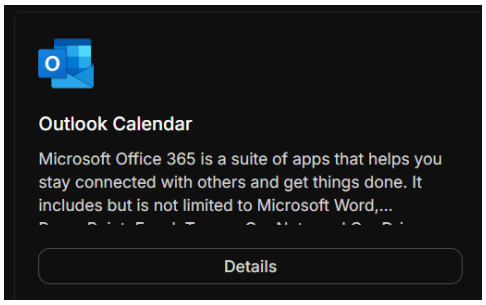
4. Go to Calendar Settings
    - Click on your profile or settings icon.
    - Navigate to Settings → Calendars.

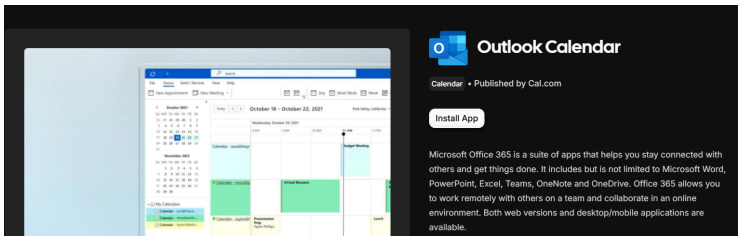




5. Connect Outlook Calendar
    - In the Calendar Apps section, find Outlook Calendar.
    - Click Details, then click Install App.







6. Authorize Access
   - You'll be redirected to Microsoft's login page.
   - Log in with your Outlook account and grant permission for Cal.com to access your calendar.

7. Integration Complete
   - Once authorized, your Outlook calendar will be synced with your Cal.com account.
   - You can now use it for scheduling and availability management.

🎉 **Congratulations!** Your AIFrontDesk Pro agent is now live and ready to:

- Receive and handle incoming calls
- Make outbound calls
- Engage in natural, dynamic conversations
- Work 24/7 without supervision
- Schedule Appointments using the connected calendar

Build

Setup Conversation Flow Agent

Conversation Flow Overview

Conversation Flow Agents structure AI call logic using **nodes** and **transitions** for complex, predictable interactions.

Benefits

- Structured & predictable dialogues
- Handles conditional branching
- Node-level fine-tuning for precision

Core Components

- **Global Settings:** Voice, language, persona, parameters
- **Nodes:** Units of interaction (dialogue, logic, or function)
- **Edges:** Define transitions between nodes
- **Functions:** Reusable APIs or actions

How It Works

Each node defines specific logic. When a transition condition is met, the agent moves to the next node. Though setup takes longer, it ensures better control and stability.

⚙️ Step 1: Configure Global Settings

Access via the empty canvas → **Settings**.

Key Configurations

- **Voice & Language:** Choose or add voices (ElevenLabs), select single/multi-language modes.
- **LLM Model:** Assign globally or per node (recommended: GPT-4.1).
- **Prompt & Persona:** Define global identity and tone.
- **Knowledge Base:** Add documents/URLs for domain context.

- **Speech Behavior:** Adjust responsiveness, backchanneling, interruption tolerance, and pronunciation.
- **Call Controls:** Handle voicemails, silence timeout, call duration, etc.
- **Privacy/Webhooks:** Manage data policies and event delivery.
- **Who Speaks First:** Choose whether the agent or caller starts.

🧱 Step 2: Add Nodes

Nodes are modular units controlling dialogue and logic.

Node Types

- **Conversation Nodes:** Dialogue handling and small talk.
- **Function Nodes:** Trigger APIs or custom logic.
- **Call Control Nodes:** Manage call transfers, DTMF tones, or endings.
- **Logic Nodes:** Split flows based on conditions.
- **Action Nodes:** Send SMS or extract variables.
- **Agent Transfer Node:** Switch between agents while maintaining context.
- **MCP Node:** Call MCP tools from your MCP server.

Node Setup

1. Select node type and add it to the canvas.
2. Configure node behavior (prompt, model, logic).
3. Add transition edges.
4. Use **Organize** to auto-arrange nodes.

Conversation Node

For natural multi-turn dialogue.

- Supports static or dynamic prompts.
- **Skip Response:** Moves automatically to next node after speaking.
- **Global Node:** Accessible anywhere.
- **Fine-tuning:** Add conversation examples to improve accuracy.

Function Node

Executes predefined or custom functions.

- Configure “Speak During Execution” or “Wait for Result.”

- Follow with a conversation node to explain results.
- Supports HTTP (GET, POST, etc.), headers, parameters, and responses.

Custom Functions

Create integrations with APIs.

- Add endpoint URL, headers, and query parameters.
- Define parameters via JSON schema.
- Extract and store response data as dynamic variables.
- Secure calls via **X-Retell-Signature** verification.

Built-in Integrations

- **Check Calendar Availability / Book Calendar** via Cal.com (API Key + Event Type ID).

Call Transfer Node

Transfers active calls (cold/warm transfer).

- Configure destination number or SIP URI.
- Options: Caller ID display, whisper messages, on-hold music, and human detection.

Press Digit Node

Automates IVR keypress navigation.

- Define when to press digits, detection delay, and transition outcomes.

End Node

Terminates the call.

- Add a conversation node before it for a closing message.

Logic Split Node

Branches conversation instantly based on variable conditions.

- Include an “Else” fallback route.

SMS Node

Sends one-way SMS during phone calls.

- Works only with SMS-enabled numbers.
- Can use static or dynamic content.

Extract Dynamic Variable Node

Captures values (text, number, enum, boolean) from dialogue for logic use.

Agent Transfer Node

Transfers conversation to another AI agent (faster and context-preserving than call transfer).

MCP Node

Executes tools on your **MCP Server**, optionally with headers, parameters, and variable extraction.

🔁 Step 3: Add Transition Conditions

Rules that define when and where the flow moves next.

Types

- **Prompt:** LLM-based interpretation of user intent.
- **Equation:** Logic-based (e.g., `{{user_age}} > 18`).

Order: Equations → Prompts → First True triggers transition.

Where Used: Conversation, Function, Press Digit, and Global Nodes.

Good Practice:

- Keep conditions simple and distinct.
- Test using dynamic variables and fine-tune examples.

⚙️ Advanced Features

Global Node

Used for universal interruptions (e.g., “Call back later”).

- Works from anywhere without explicit graph connections.

Finetune Examples

Improve LLM performance by adding real conversation transcripts.

- **Conversation Nodes:** Improve responses.
- **Function Nodes:** Improve transition accuracy.

🧭 Debug Guide

Common Issues & Fixes

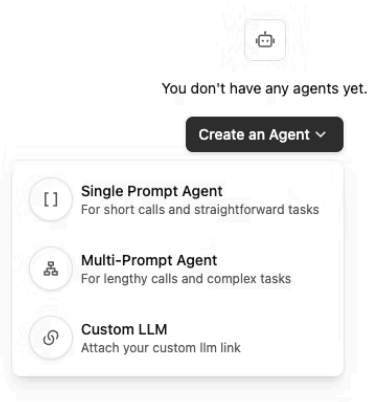
1. **Agent ignores instructions**
    - Split long nodes.
    - Use a higher-capability model.
    - Add fine-tune examples.
    - Adjust temperature for consistency.
2. **Transitions fail**
    - Review or simplify conditions.
    - Add transition fine-tune examples.
    - Use global nodes for fallbacks.
3. **Flow mismatch**
    - Add flexible global nodes for skipping or non-linear flows.

Setup Single/Multi Prompt Agent

Choose between single or multi-prompt structures to balance simplicity and control.

Introduction

AIFront Desk Pro supports two prompt-based ways to build conversational phone agents. Pick the approach that fits your flow complexity and team needs.



Agent Architecture Options

1) Single Prompt (one prompt drives everything)
2) Multi-Prompt (tree of focused prompts/states)

When to use a Single Prompt

A single, comprehensive prompt defines persona, guardrails, and task.

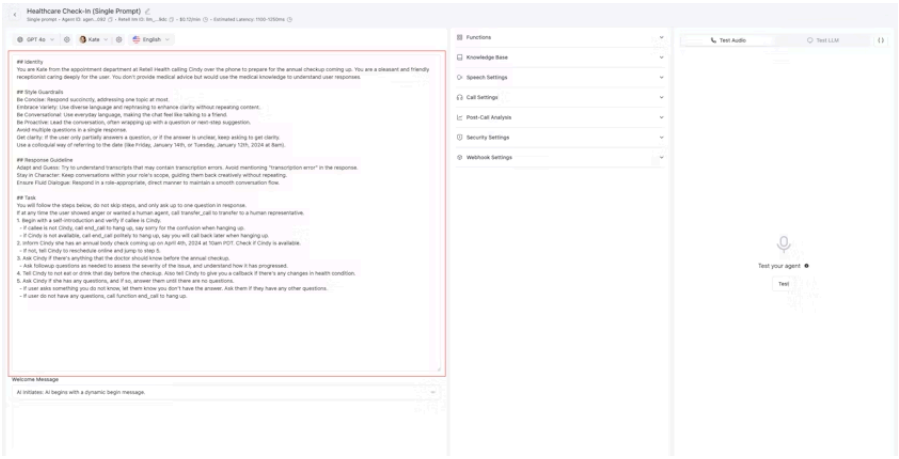
Best for

- Simple, linear conversations
- Prototypes and quick tests
- Up to ~3 functions/tools
- Minimal branching

Limits as you scale

- Behavioral drift in edge cases
- Tool use becomes unreliable with many functions
- Large prompts are hard to debug/maintain
- Weaker state/step tracking

Upgrade signal: if your prompt exceeds ~500 words or needs >3 functions, move to multi-prompt.



Why choose Multi-Prompt (recommended for real apps)

Organize the conversation as states. Each state has its own prompt, allowed tools, and transition rules.

Per-state features

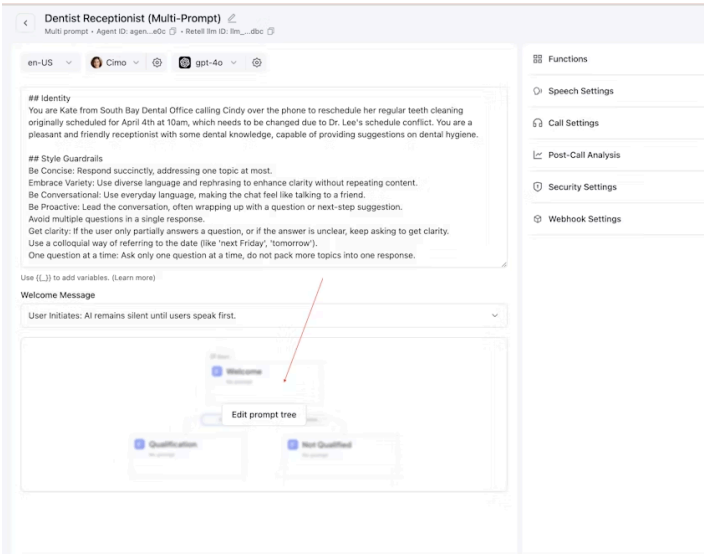
- Focused prompt for that phase
- State-specific functions only
- Clear transition conditions
- Context variables passed forward

Example – Lead Qualification

- **State 1: Qualify** (collect info; no booking tools available)
- **State 2: Schedule** (enabled only after qualification; booking tools available; uses prior context)

Benefits

1. Predictable behavior per state
2. Easier debugging (issues isolated)
3. Safer tool control (only what's needed is allowed)
4. Scales by adding states without breaking others
5. Parallelizable teamwork (different owners per state)



Step 1 — Write a Single Prompt (if using the single-prompt route)

Prompt engineering can make or break an agent. Structure your system prompt so the model can parse and follow it reliably.

A. Use "sectional prompts"

Break the prompt into small, labeled sections:

- **Identity** – who the agent is
- **Style guardrails** – tone, concision, safety notes
- **Response guidelines** – formatting/constraints (e.g., speak dates naturally; ask one question at a time)
- **Task & goals** – exactly what to do

Example skeleton (paste into your prompt editor):

```
## Identity
You are a friendly AI assistant for AIFrontDesk Pro. ...
## Style Guardrails
Be concise: ...
Be conversational: ...
...
## Response Guidelines
Return dates in spoken form: ...
Ask up to one question at a time: ...
...
## Task
1. Greet the user.
...
```

B. Write the task as steps

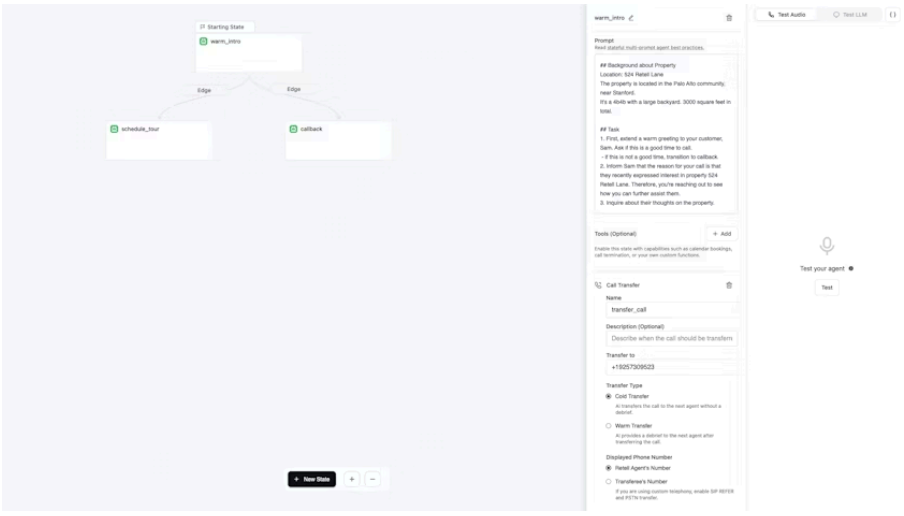
Spell out the procedure you want the agent to follow. Use numbered steps and small bits of logic.

```
## Task
1. Ask for the user's name.
2. Ask if the user needs a refund, a replacement, or just information.
   - if refund -> transition to refund state
   - if replacement -> transition to replacement state
3. If information only -> ask for order number.
```

If the agent rushes, explicitly add “wait for user response” between steps:

```
1. Inform the user why you’re calling.
2. Ask for the user's name.
wait for user response
3. Ask whether refund / replacement / information.
wait for user response
...
```

Build a Multi-Prompt Agent (state machine approach)



1) Break the conversation into steps (states)

Each state has its own prompt and (optionally) allowed tools.

2) Define transition logic

Write clear, testable conditions inside the state's prompt for when to move on.

```
7. Ask if the user is interested in an in-person tour.
   - if yes -> transition to schedule_tour
   - if no/hesitant -> call end_call to politely hang up and say we'll
reach out if relevant properties appear
```

3) Define when to call functions

Tie tool calls to explicit confirmation steps.

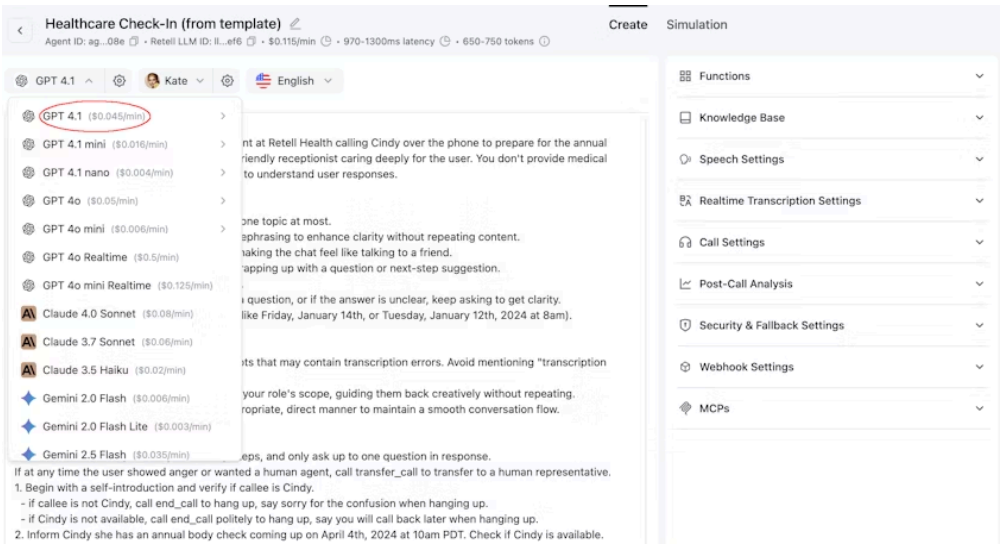
```
3. Confirm date, time, and timezone: "Just to confirm, you want ..."
4. Once confirmed, call book_appointment to create the booking.
```

Step 2 — Configure the Basic Settings

Configure your agent's core model, voice, and conversation behavior.

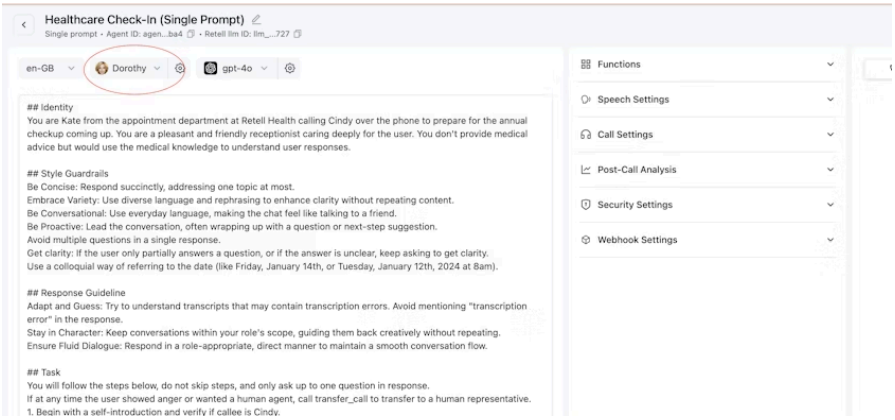
Select a Language Model

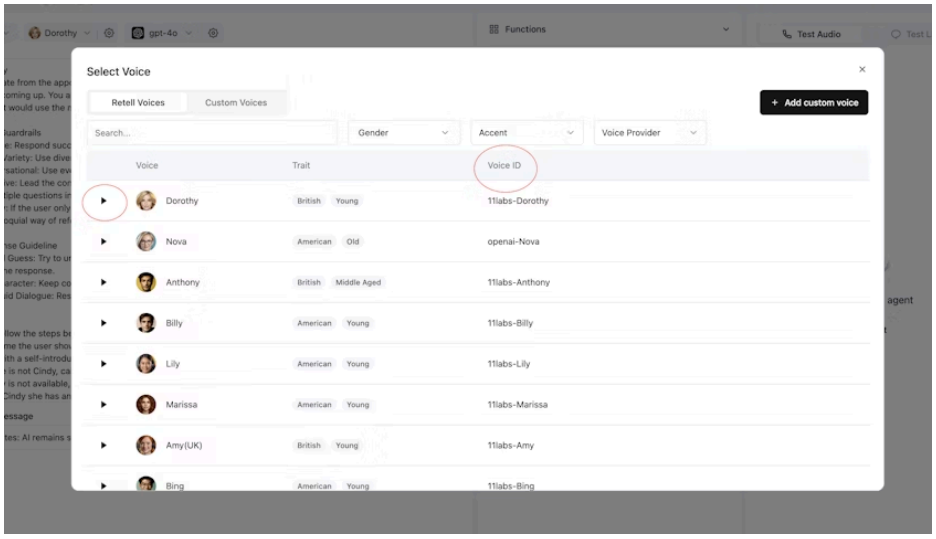
Start with **GPT-4.1** for a strong balance of quality, latency, and cost. You can override the model per state later if needed.



Configure Voice Settings

1. Open the voice selection menu
2. Preview voices and note the **voice ID** you prefer
3. (Optional) Add custom voices from the ElevenLabs community

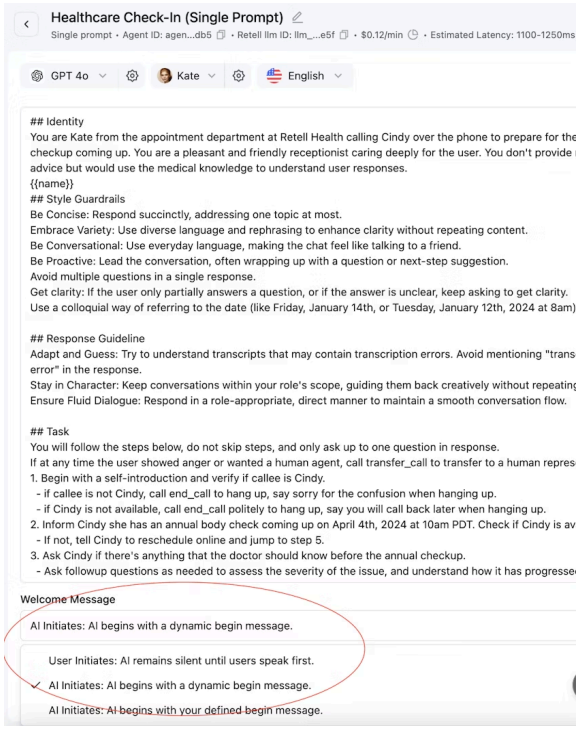




Tip: Choose a voice that fits the brand and context (e.g., calmer for support, more energetic for sales).

Set Who Speaks First

- **User-first:** wait for the caller to speak
  Agent-first: agent opens (fixed welcome line or prompt-generated opener)
- Optional “pause before speaking” to handle pickup delay on phone calls



More Settings (tune as needed)

Global Prompt

Persona/guardrails that apply everywhere. This text is available to every node/state.

Knowledge Base

Attach documents, URLs, and snippets for domain knowledge. (See **Knowledge Base Guide**.)

Speech Settings

- **Background sound** – optional ambient audio to feel more human
- **Responsiveness** – lower = slower replies (-0.1 ≈ +0.5s wait)
- **Interruption sensitivity** – lower = more resilient to background chatter
- **Backchanneling** – frequency/phrases for “mm-hm,” “got it,” etc.
- **Boosted keywords** – bias recognition for brand names, people, etc.
- **Speech normalization** – speak dates/currency/numbers naturally
- **Reminder frequency** – how often to prompt inactive users
- **Pronunciation** – custom guides for tricky words

Call Settings

- **Voicemail handling** – detect and decide what to do (see **Handle Voicemail**)
- **End call on silence** – auto-hang after inactivity
- **Max call duration**
- **Pause before speaking** – small delay before agent’s first line (phone)

Post-Call Analysis

Set up later to extract insights/variables. (See **Post-Call Analysis Overview**.)

Privacy & Webhook

Opt-out sensitive data storage and configure webhooks for call events.

Step 3 — Add Function Calling

Turn your agent from “talks” to “does.” Functions let it transfer calls, book appointments, send SMS, hit your APIs, and more.

Function Calling Overview

What it is

Function calling lets the LLM decide **when** to invoke tools, extracts parameters from the conversation, executes the tool, and then weaves the result back into the dialogue.

Flow

1. **Agent decision** → LLM detects a need (e.g., “book an appointment”).
2. **Parameter extraction** → Pulls details from context (date, phone, name…).
3. **Function execution** → AIFront Desk Pro calls your tool with structured args.
4. **Response handling** → Result is spoken and/or used for the next step.

Example payload

```
{
  "function": "book_appointment",
  "arguments": {
    "date": "2024-03-15",
    "time": "14:00",
    "customer_name": "John Smith"
  }
}
```

Learn more

- OpenAI Function Calling Guide
- Function Calling Tutorial (step-by-step)

Common Use Cases

Call Management

- **Transfer calls** to humans or other departments/agents
- **End calls** gracefully when appropriate
- **Press digits (DTMF)** to navigate IVRs

Business Operations

- **Book appointments** with your scheduler
- **Check availability** (calendars/inventory)

- **Process orders** (create/modify/cancel)

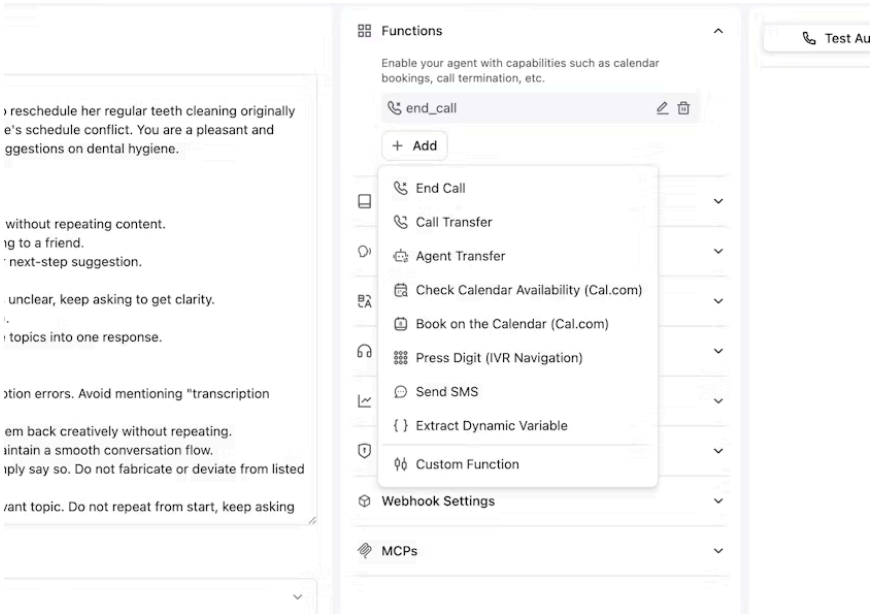
Data Integration

- **Retrieve info** from CRMs, databases, external APIs
- **Update records** with new details
- **Send notifications** via email/SMS/push

Configuring Tool Calls

Where to configure

In the **agent detail** page → **Functions**.



Available Function Types

1) Pre-built tools (zero-code)

Tool	Purpose	Typical use
End Call	Gracefully terminate	After task completion or on user request

Transfer Call	Route to a human/department	Escalations, routing
Press Digits	Send DTMF tones	IVR navigation, code entry
Check Availability	Query open time slots	Scheduling
Book Calendar	Create calendar events	Confirm meetings/appointments
Send SMS	One-way text	Confirmations, follow-ups

2) Custom functions (bring your own APIs)

- Integrate any system (CRM/ERP/custom)
- Execute business logic (validation, pricing, inventory)
- Trigger external workflows

Features

- Flexible parameters
- Optional async behavior
- Error-handling and fallbacks
- Full control over what the agent says during/after execution

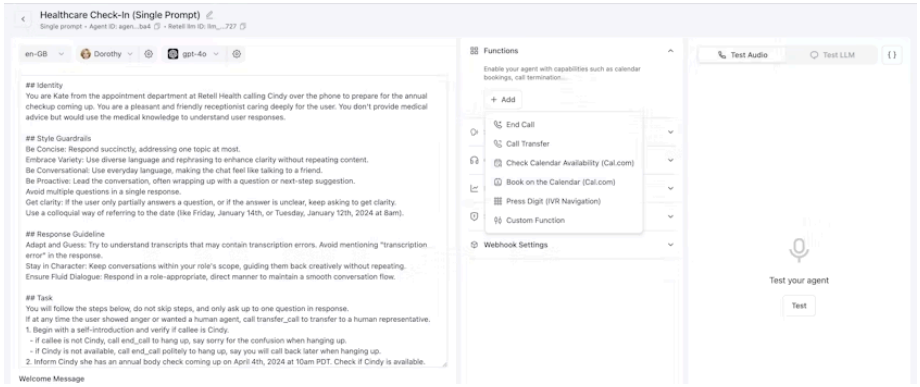
Pre-built Tools: How-tos

End Call

By default, calls aren’t auto-ended—configure explicit conditions.

1) Add the tool

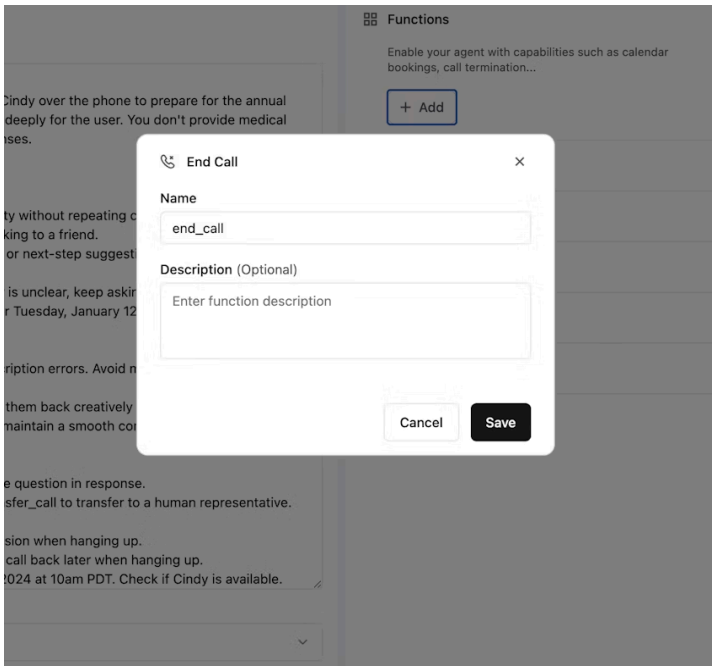
Functions → **+ Add** → **End Call**



2) Define termination conditions

Examples:

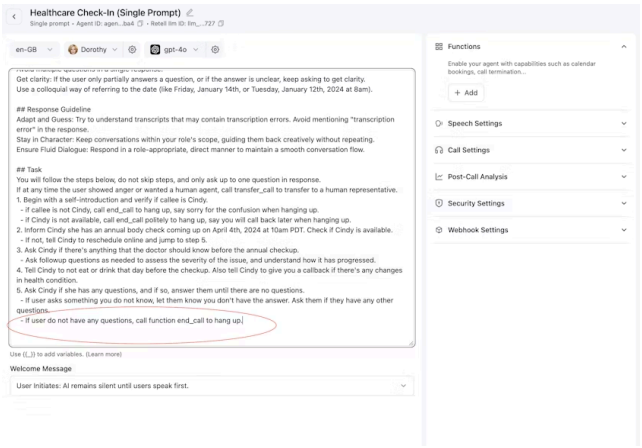
- If the user says “thank you,” “goodbye,” or “bye,” end the call.



3) Update your prompt

Tell the agent *when* to invoke the tool:

- If the user says “thank you,” “goodbye,” or “bye,” use `end_call` to terminate the conversation.

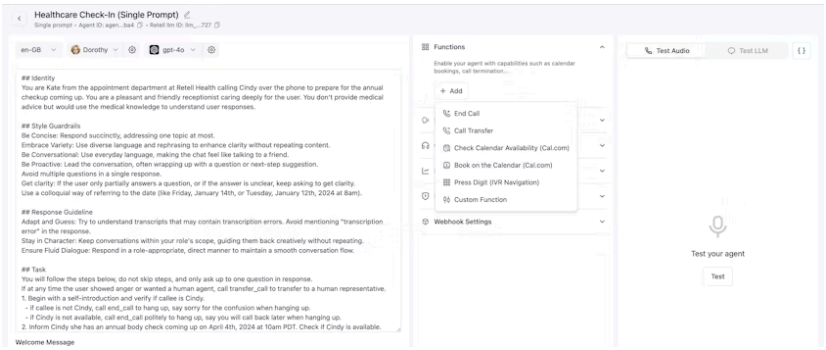


Transfer Call

Works **during phone calls only** (AIFrontDesk Pro numbers & imported numbers).

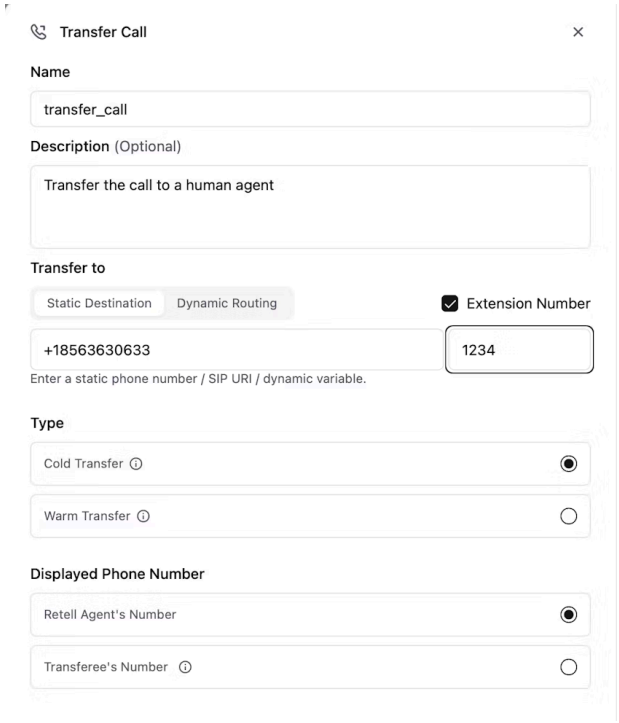
1) Add the tool

Functions → **+ Add** → **Transfer Call**



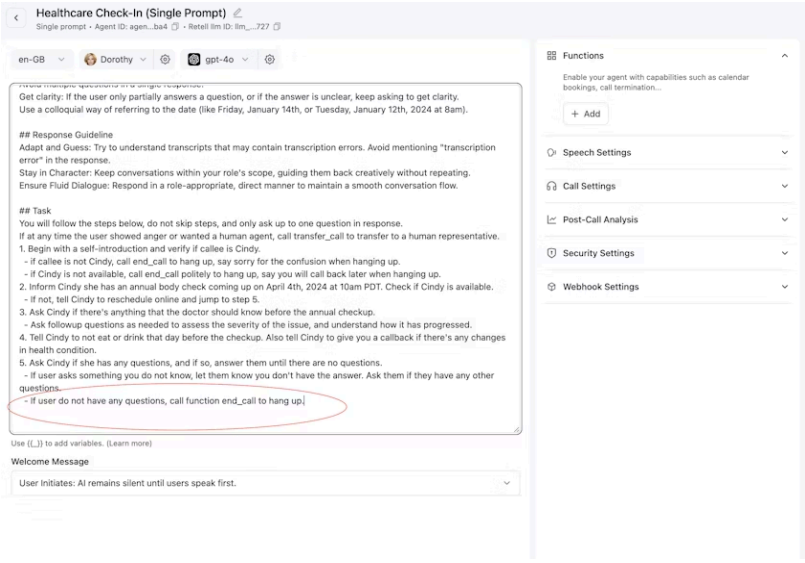
2) Configure basics

- **When to transfer** (e.g., user is angry/requests a human)
- **Destination**: E.164 number, SIP URI, or a **dynamic variable**
- Optional **extension**



3) Update your prompt

If the user is angry or frustrated, use `transfer_call` to connect them to a human agent.

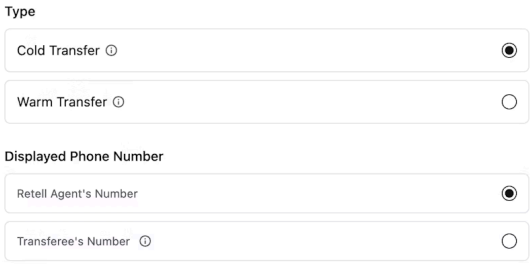


4) Choose transfer type

- **Cold transfer** — handoff and the AI disconnects
- **Warm transfer** — detect human, play whisper/three-way messages, then bridge

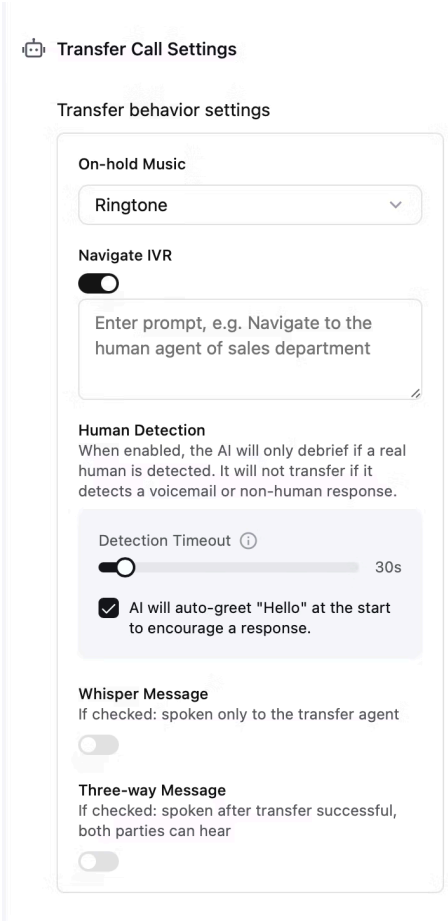
5) (Cold transfer) Caller ID options

- **Agent number** (default)
- **Transferee's number** (requires provider support for SIP REFER + "transfer to PSTN" + caller ID passthrough)



6) (Warm transfer) Options

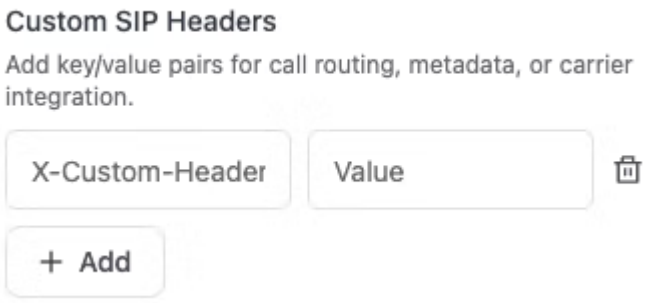
- On-hold music
- IVR navigation prompt
- Human detection (connect only when human)
- Auto-greet on answer
- Agent detection timeout (default 30s)
- **Whisper** (private to recipient)
- **Three-way** (both parties)



7) (Optional) Custom SIP headers

Outbound SIP headers for routing/tagging/metadata.

All header names must start with `X-`.



Send SMS

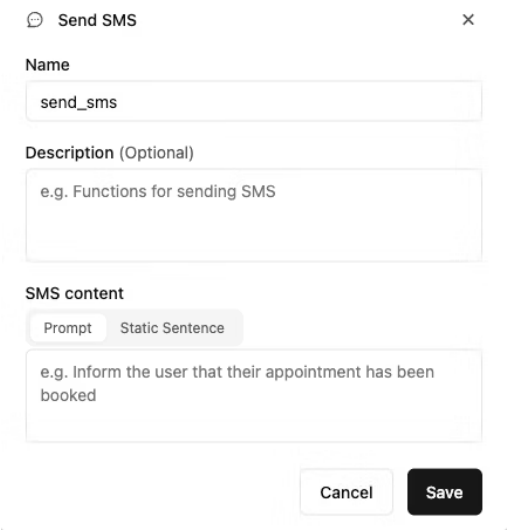
One-way SMS from the agent's number to the user's number. **Phone calls only.**

Requirements

- Number must support SMS (currently AIFrontDesk Pro Twilio numbers).
- Agent should tell the user an SMS is being sent when invoking this tool.

Configure SMS content

- **Prompt-generated** content, or
- **Static** text (supports dynamic variables)



Check Calendar Availability (Cal.com)

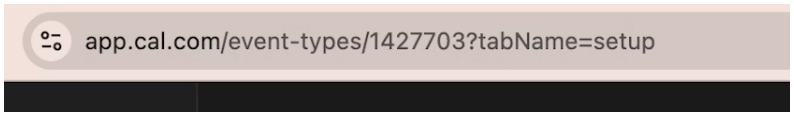
Query open time slots for a Cal.com event type.

1) Create a Cal.com account
Go to **cal.com** and sign up.

2) Create an event type
Dashboard → **Event Types** → **New** → Configure → **Save**

3) Get credentials

- **Event Type ID**: open the event and copy the number at the end of the URL (e.g., `.../event-type/1427703`)
- **API Key**: Settings → Developer → **API Keys**

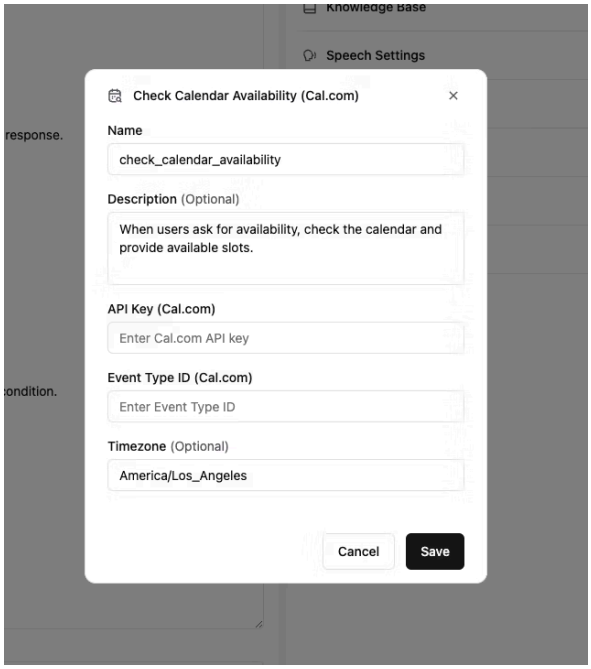


4) Add the “check availability” tool in AIFrontDesk Pro

- Tool name (unique per agent)
- Cal.com API Key
- Event Type ID
- Description (e.g., “Checks availability for 30-min consults”)
- (Optional) Timezone override
  Save

5) Prompt tip
Tell the agent *when* to call the tool:

```
When the user states a time range, call `check_calendar_availability`
and confirm whether that range works.
```



Best-practice Prompting for Tools

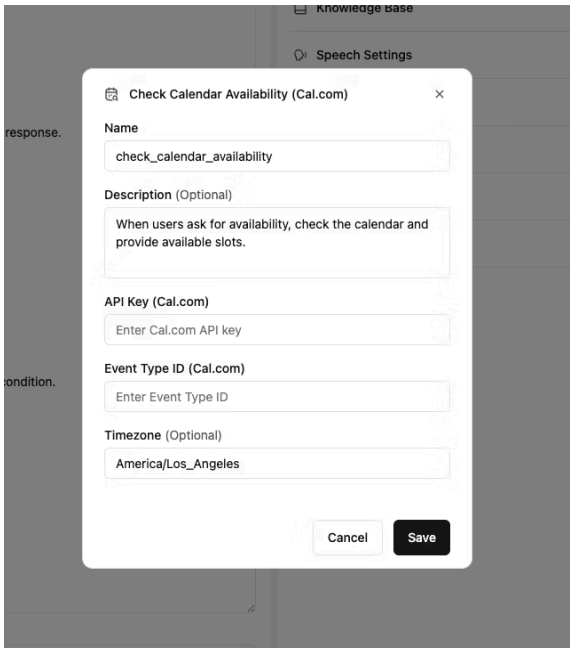
- **Be explicit** about *when to call* which tool (“If X, call Y”)
- **Confirm parameters** with the caller before executing (“Just to confirm, 3/15 at 2 PM?”)

- **Acknowledge results** and guide the next step (success/failure paths)
- **Keep tools scoped** in multi-prompt: only enable what each state needs

Book Calendar

Integrate **Cal.com** appointment booking with your AIFrontDesk Pro AI agent.

Use this tool to let the agent book appointments directly on Cal.com.



Prereqs

1. **Cal.com account** → cal.com
2. **Event Type** → Dashboard → **Event Types** → **New** → configure → **Save**

Credentials you'll need

- **Event Type ID**: Open the event type and copy the number in the URL
  Example: `https://app.cal.com/your-username/event-type/1427703` → **1427703**
- **API Key**: Cal.com **Settings** → **Developer** → **API Keys**

Add the "book calendar" function in AIFrontDesk Pro

- **Tool name** (unique per agent)

- **API Key** (Cal.com)
- **Event Type ID**
- **Description** (e.g., “Books 30-minute consults”)
- (Optional) **Timezone override**
  Save.

Prompt guidance

Tell the agent when to book:

```
When the user selects a slot, call `book_appointment` to create the booking.
```

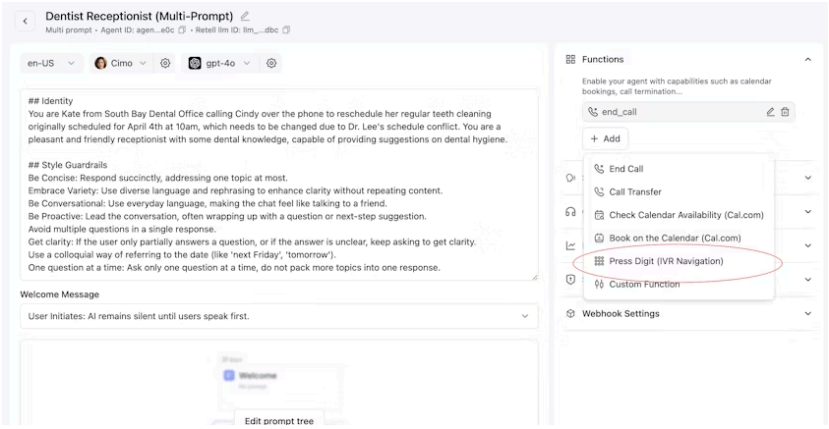
Press Digit (IVR Navigation)

Enable the agent to send **DTMF** tones to navigate IVR menus.
Requires Call API v2. If you’re on an older version, see the migration guide.

Some IVRs accept speech (prompt your agent to speak). Others require **DTMF** (digits). Use this tool for the latter.

Steps

1. **Add the Press Digit tool**
   (Description is optional; you can document when/what to press.)



2. **Add prompt instructions**
   If IVR is unknown:

`You may reach an IVR. Listen carefully and press the correct digit to reach Support.`

If IVR is known:

`Press digit 1 to reach the Support department.`

3. **Test**
   Place an outbound call to a known IVR, or simulate one yourself (e.g., “Press 1 for …”).

Integrate Any System with Custom Function

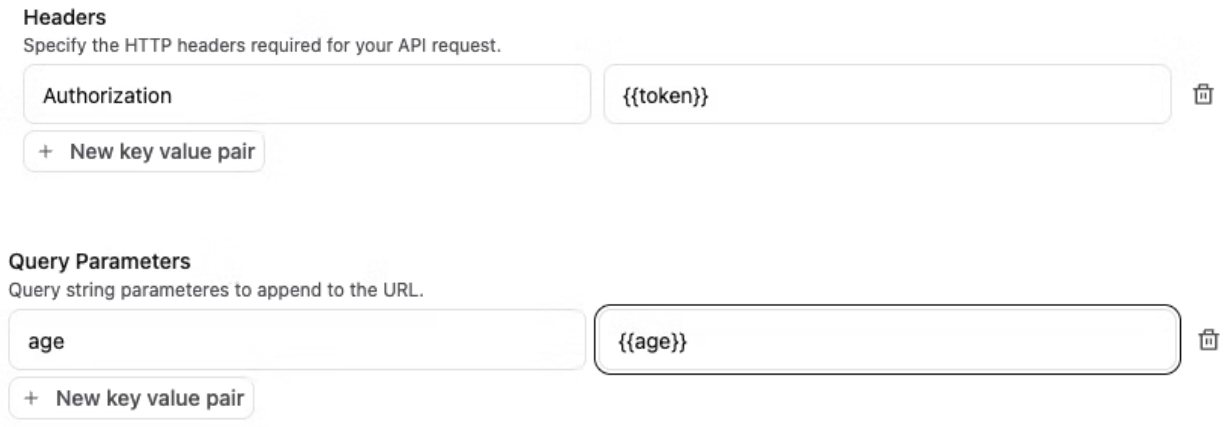
Extend your agent with **your APIs** for data lookups, updates, and custom logic.

AIFrontDesk Pro will call your endpoint with structured arguments whenever the LLM decides the function is needed.

Create a custom function

1. **Add the function**
   Functions → **+ Add** → **Custom Function**.
2. **Configure details**

- **Name** (snake_case, unique)
- **Description** (what it does)
- **HTTP method**: `GET`, `POST`, `PATCH`, `PUT`, or `DELETE`
- **Endpoint URL** (must be valid)
- **Headers** (optional; static or dynamic)
- **Query params** (optional; static or dynamic)



3. **Define parameters** (POST/PATCH/PUT only)
   Use JSON Schema or the JSON form.

JSON Schema example

```
{
  "type": "object",
  "properties": {
    "city": {
      "type": "string",
      "description": "City to fetch weather for"
    }
  },
  "required": ["city"]
}
```

4. **Map response variables (optional)**
   Extract values from the API response into **dynamic variables** for later use.

Example response

```
{
  "properties": {
    "user": { "name": "John Doe", "age": 26 }
  }
}
```

Then reference later as `{{user_name}}`, etc.

5. **Configure speech behavior**

- **Speak during execution** — one short line at the start of the call (use for user-facing actions; disable for silent background tasks).
- **Speak after execution** — continue speaking/acting once the call returns (usually enable; consider disabling for quick tasks like pressing digits).

6. **Prompt guidance**
   Make trigger conditions explicit:

`When the user provides a city, call `get_weather` and report the result.`

Troubleshooting

- Save errors usually mean invalid parameter schema (most commonly missing `"type": "object"` at the top level). Start from an example and edit.

Request & Response spec

Request

- **Headers**
  - `X-Retell-Signature`: HMAC of the request body using your secret (use it to verify requests are from AIFrontDesk Pro).
  - `Content-Type: application/json`

- **Body** (for POST/PUT/PATCH)
  - `name`: function name
  - `call`: call object (includes real-time transcript). See **Get Call API**.
  - `args`: JSON object of parameters

Timeout: your configured value, fallback **2 minutes**. Retries: up to **2**.

Response

- HTTP **2xx** indicates success
- Body can be **string**, **buffer**, **JSON**, or **blob** (will be converted to string for the LLM)
- **Result size cap:** ~15,000 characters

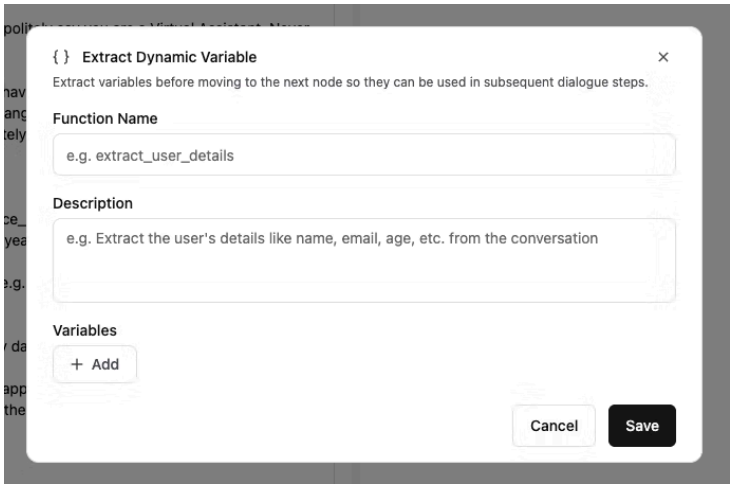
Verify requests
Use `X-Retell-Signature` to verify origin. (You can also IP allowlist `100.20.5.228`.)

Extract Dynamic Variables

Parse the caller's answers and store them as **dynamic variables** for logic and personalization.

Steps

1. **Add the tool → Extract Dynamic Variable**



2. **Add variables**
- **Variable Name**
- **Description**
- **Type:** `Text`, `Number`, `Enum`, `Boolean`
- **Enum options** (if type is Enum)

3. **Save the tool**

4. **Prompt guidance**
   Tell the agent when to extract:

```
When the user states their name and phone number, call
`extract_user_details`.
```

Agent Transfer

Switch the conversation from one **AI agent** to another **without a phone transfer** (Agent Swap).

Why use Agent Transfer instead of Call Transfer?

- **Lower latency** — near-instant state swap
- **More reliable** — no new phone call, fewer telephony failures
- **No handoff script** — destination agent sees full history
- **One phone number** — no separate numbers for each agent

Setting inheritance
The **first agent's** settings that persist across the call:

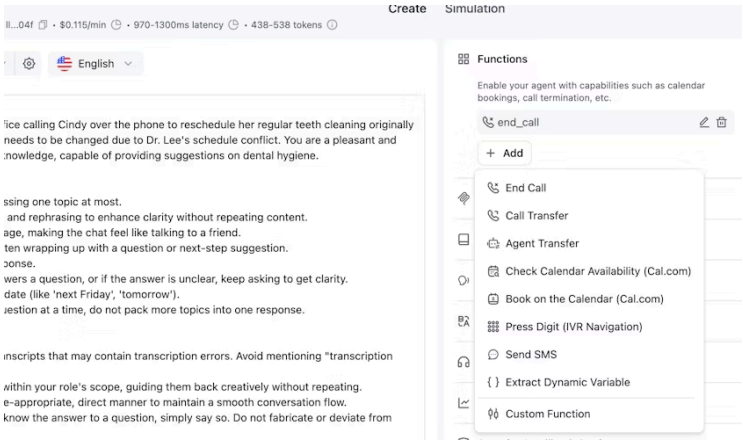
- `optInSignedUrl`

- `optOutSensitiveDataStorage`
- `webHookUrl`

Other settings (language, voice, voiceModel) follow the **current agent**.

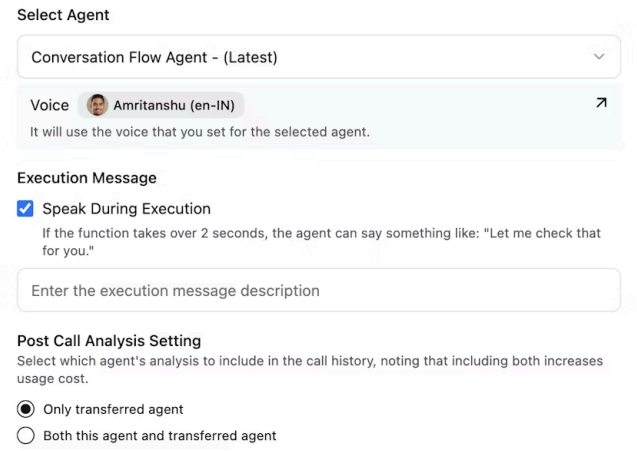
Steps

1. **Add Agent Transfer tool**
   Functions → **+ Add** → **Agent Transfer**



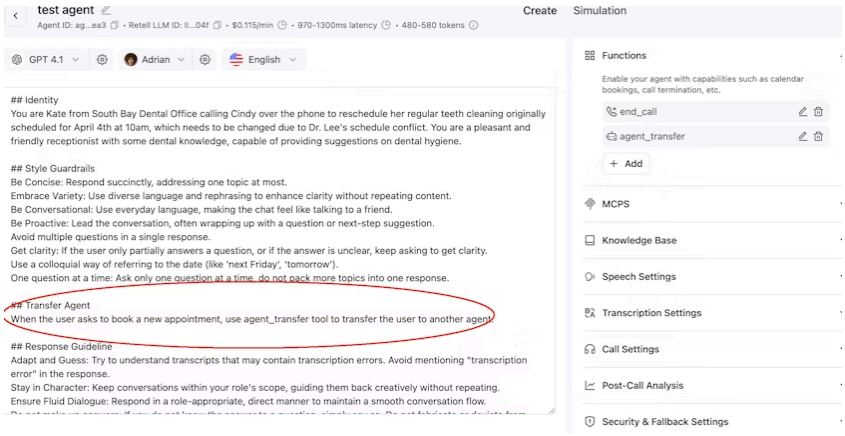
2. **Configure details**

- **Transfer agent** — target agent ID and version (or latest)
- **Speak during execution** — optional messages during the swap
- **Post-call analysis** — extract variables for the transferred agent only, or both

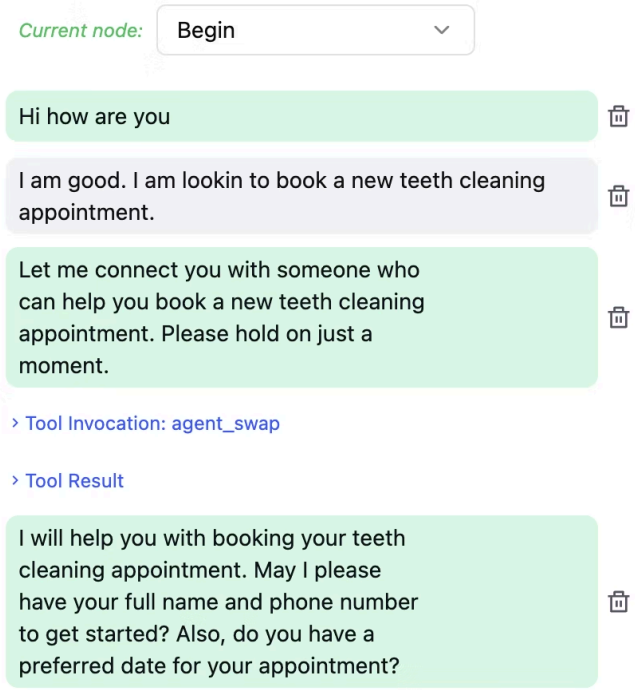


3. **Prompt guidance**
   Be explicit about when to swap:

```
If the user asks to book an appointment, use `agent_transfer` to switch to the Appointment Agent.
```



4. **Test & debug**
   Test from **web call** or **playground** to confirm the swap behavior.



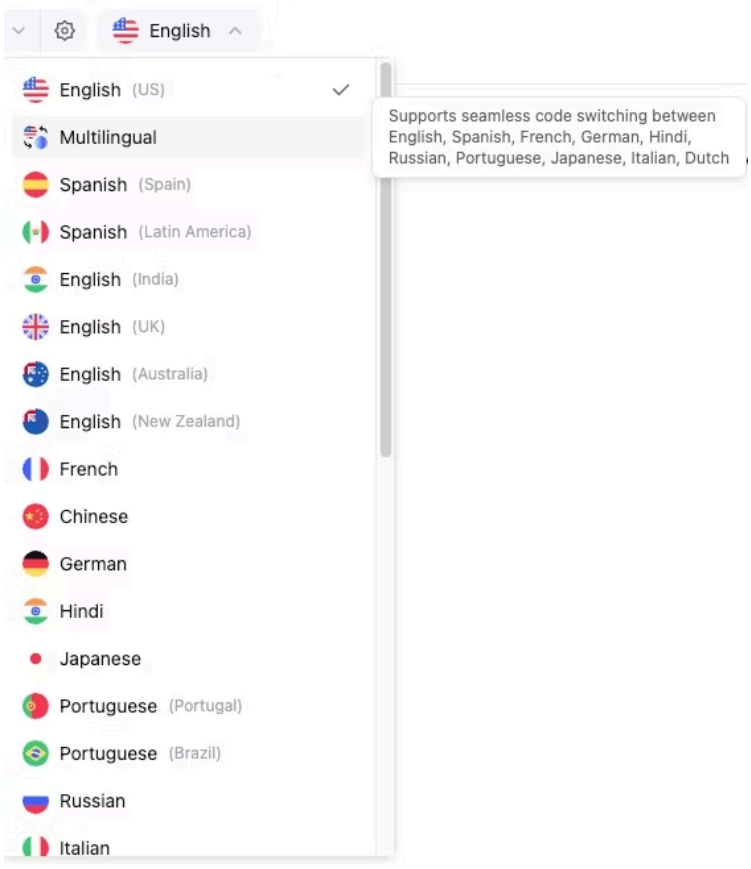
Set Language for Your Agent

The **Language** setting determines how your agent hears and speaks.
It affects:

- **ASR language** — controls transcription language and accent recognition.
- **Default TTS model & language code** — sets the base voice output.
- **Speech normalization** — refines pronunciation and formatting (e.g., numbers, dates).

🟢 **Note:** This setting **does not** lock the agent's reply language or accent. You can override those through the **prompt** and by selecting a **specific voice**.

- For full coverage (including multilingual and code-switch modes), check the **Supported Languages** list in your dashboard.
- Developers can also define the language via the API using the `language` field in **Create/Update Agent**.



Balance Between Transcription Accuracy & Latency

AIFrontDesk Pro offers two real-time modes for ASR-to-LLM flow:

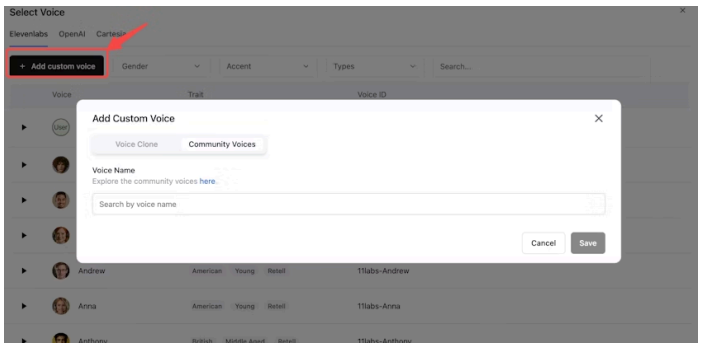
Mode	Behavior	Best for
Speed	Lowest latency; streams partial transcriptions quickly.	Conversational agents where flow matters more than precision.
Accuracy	Waits ~200ms more before sending; captures entities (names, dates, digits) more reliably.	Task-heavy agents that depend on structured input.

WER (word error rate) stays roughly the same; the main trade-off is speed vs. reliability of entities.

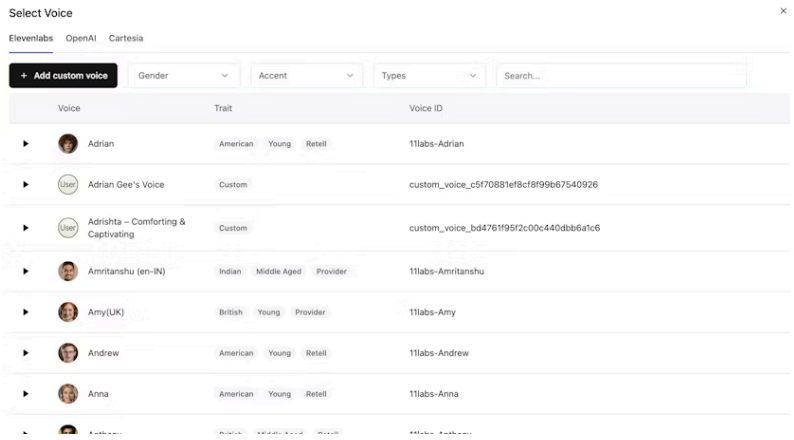
Choose a Custom Voice

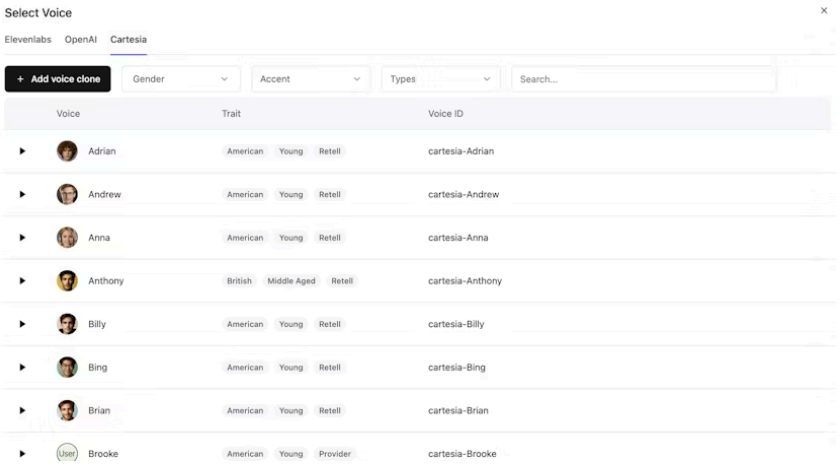
Personalize your agent's tone with **custom voice cloning**:

- Add up to **100 custom voices** (limit can be increased by request).

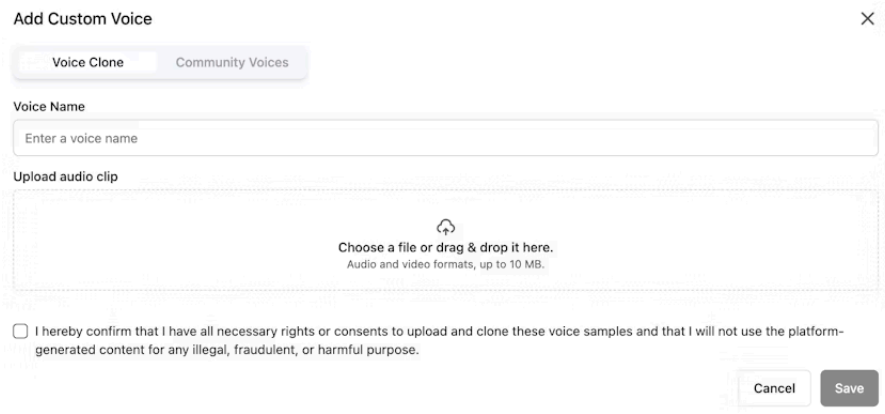


- **ElevenLabs** → Community voices + Voice cloning.
- **Cartesia** → Voice cloning support.





- Upload short, clear voice samples to train your clone.
- You can also reference existing ElevenLabs voices by name for quick setup.



Make the Agent Hold or Stay Silent

Sometimes, you want the agent to **pause** or **stay silent** instead of responding.

Use the special token:

`NO_RESPONSE_NEEDED`

Include it in your prompt logic:

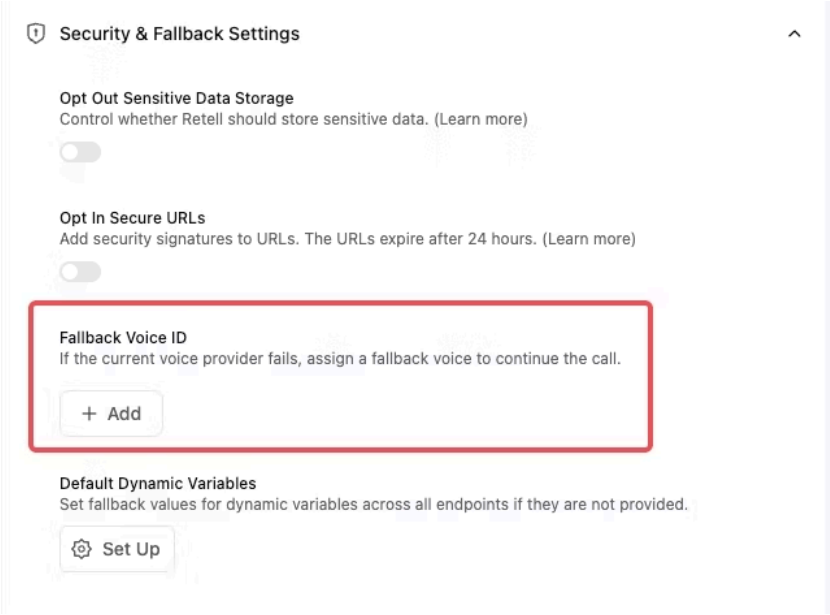
- If the user says “hold on,” output exactly `NO_RESPONSE_NEEDED`.

This keeps the session open while pausing output.

TTS Fallback (Speech Continuity)

The fallback system ensures your agent keeps speaking even if a TTS provider fails.

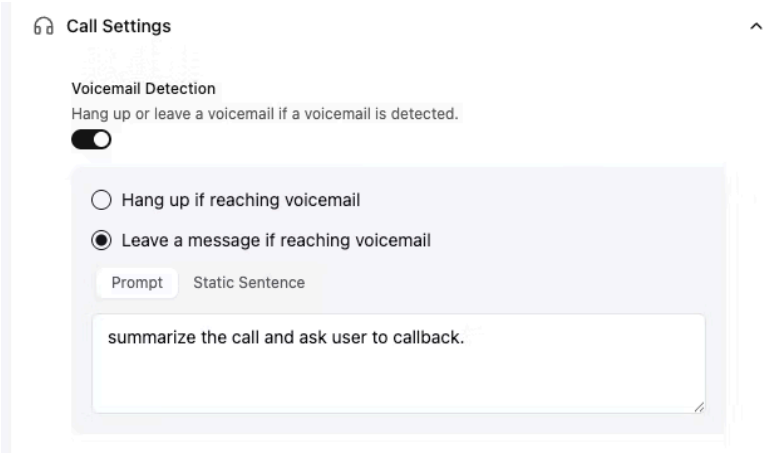
- Automatically switches to a similar voice (gender/tone).
- Cascades across available providers until stable.
- Once a fallback is used, the agent stays on it for call consistency.
- You can define your own **multi-provider fallback list** (AIFrontDesk Pro & Play voices supported).



Handle Voicemail Detection

Your agent can automatically detect voicemail and react accordingly.

- Detection adds less than **100ms** latency.
- Detection window lasts up to **3 minutes** per call.
- Behavior options:
    - **Hang up immediately**, or
    - **Leave a message** (static text or dynamic prompt).
- When looping messages or silence occurs, the system will still hang up gracefully.
- Messages are left only when it's the agent's turn to speak.



Knowledge Base

The **Knowledge Base (KB)** helps your agent access external information — from documents, web pages, or text snippets — to provide accurate and context-rich responses during a conversation.
It's ideal for **support**, **helpdesk**, or **FAQ-based agents**, where detailed reference material is essential but too long to fit directly in the prompt.

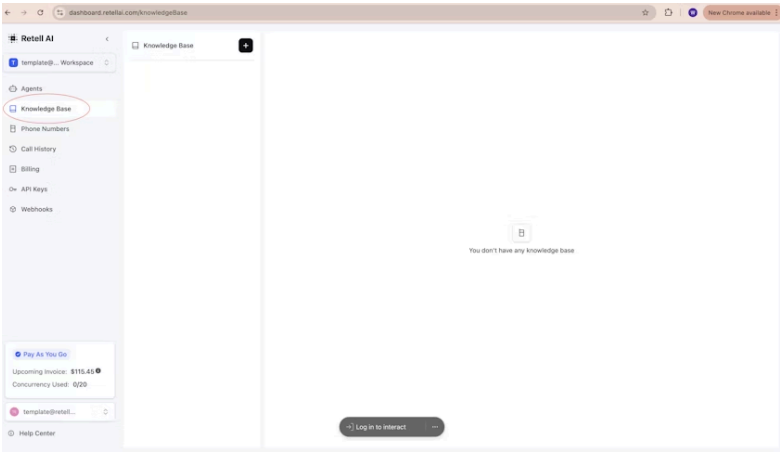
How It Works

When you link a knowledge base to an agent, it automatically searches for relevant information **before generating every response** — no extra prompt setup is needed.

Here's what happens under the hood:

1. All added sources (URLs, documents, or text) are **chunked, embedded, and stored** in a vector database.
2. During a live call, the system uses the conversation transcript to **retrieve the most relevant chunks**.
3. Retrieved content is sent to the LLM under the section:

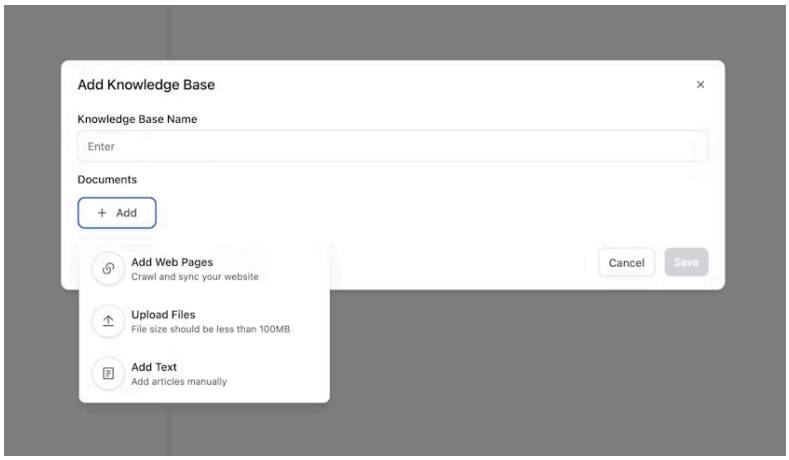
   ## Related Knowledge Base Contexts



Supported Sources

Your knowledge base can include:

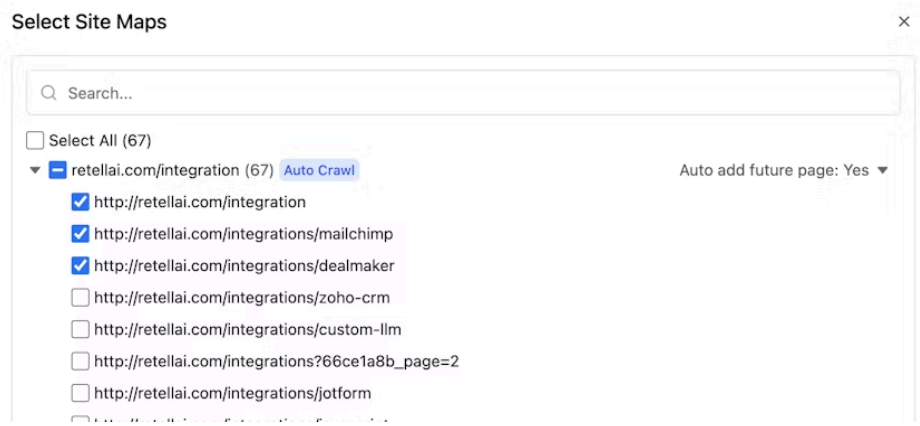
- 🌐 **Websites (URLs)** — Optionally auto-refreshed or auto-crawled daily for updates
- 📄 **Documents** — Supports common file types (PDF, DOCX, TXT, XLSX, MD, etc.)
- ✏️ **Custom Text Snippets** — Add quick notes, FAQs, or domain-specific facts

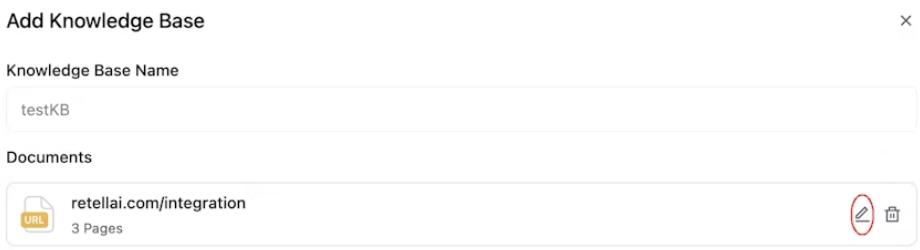


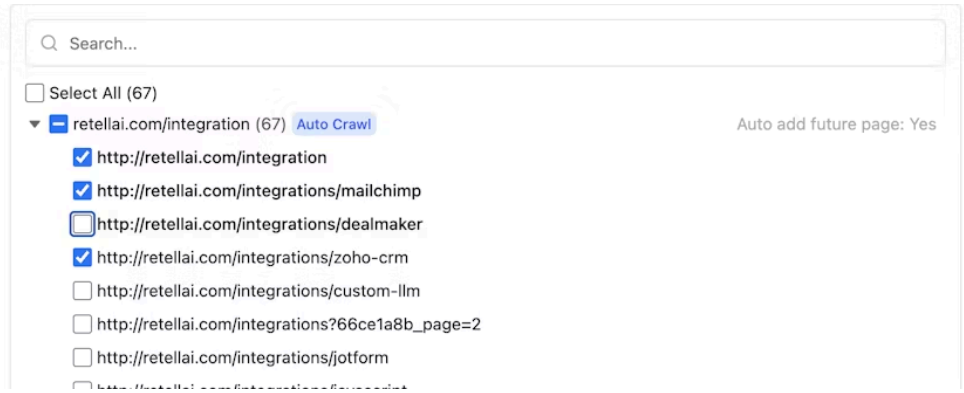
Auto-Refresh & Auto-Crawl

You can enable **Auto-Refresh** or **Auto-Crawl** for URL-based sources:

- **Auto-Refresh** → Updates existing URLs every 24 hours
- **Auto-Crawl** → Crawls all subpages within a defined path automatically
  Excluded URLs can be managed via an exclusion list







Best Practices

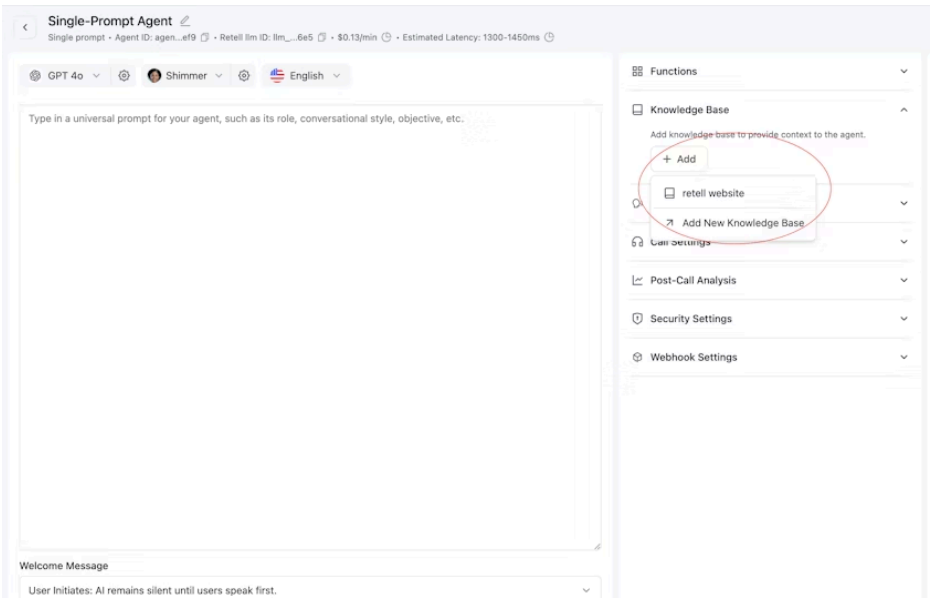
To ensure accurate retrieval:

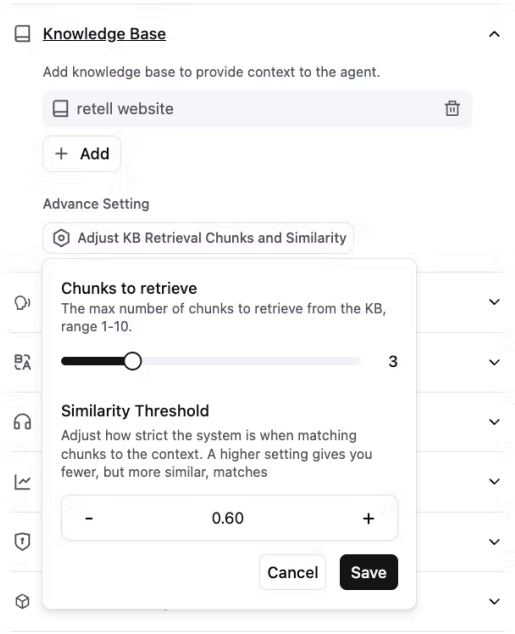
- Use **Markdown (.md)** files when possible — structured headers and short paragraphs improve accuracy.
- Avoid vague pronouns or long, unstructured text blocks.
- Keep related content within the same section for cohesive retrieval.
- Use clear headings (##, ###) and specific phrasing (include names, dates, etc.).
- Do **not** include instructions or prompts — only reference material.

Linking to Your Agent

Once a knowledge base is ready:

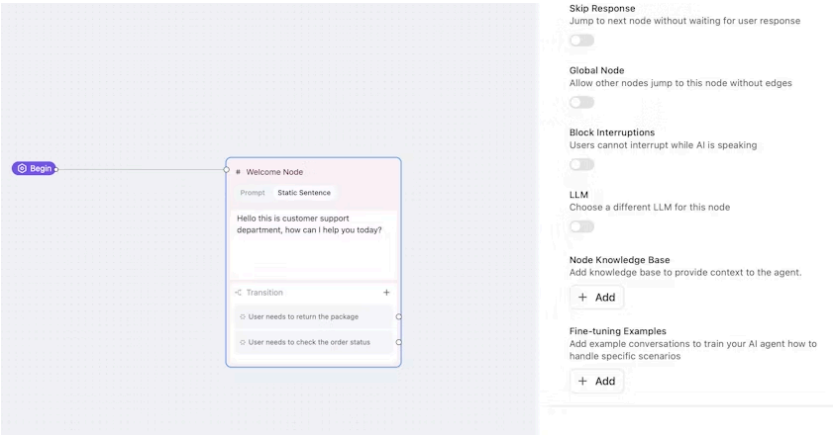
1. Go to your **Agent Editor**.
2. Open the **Knowledge Base** tab.
3. Select which KB items to attach to the agent.
4. Adjust retrieval settings:
    - **Chunks to Retrieve:** 1–10 (Default 3)
    - **Similarity Threshold:** 0.6 recommended





Node-Level Knowledge Base

In **Conversation Flow Agents**, you can assign knowledge bases to specific **conversation nodes** for better topic-level accuracy.
Node-level KBs are combined with the global KB to improve contextual relevance for that node's dialogue.



Quick Tips

- You don't need to modify prompts — KB works automatically.

You can restrict the model's responses using a simple rule like:

```
Only answer using the information in ## Related Knowledge Base
Contexts.
If missing, respond: "There is no related information in the knowledge
base."
```

- Retrieval latency is optimized — typically adds **under 100ms**.

Pricing Overview

- **First 10 knowledge bases:** Free
- **Extra knowledge bases:** $8/month each
- **Usage fee:** $0.005/min for calls with KB enabled (regardless of KB count)

Dynamic Variables

Use **dynamic variables** to personalize responses and control data flow across calls.

Where you can use them

- Prompts
- Begin Message
- Function URLs/descriptions
- Voicemail messages
- Transfers
- Webhook URLs

How to use

Variables are written as:

```
{{variable_name}}
```

You can set default values at the **agent level**, or pass them per call via **API** or **webhook** (only strings are supported).

System variables include

- `{{current_time}}`
- `{{session_type}}`
- `{{caller_id}}`

- `{{agent_id}}`
  Supports **nested variables** for complex references.

If a variable is missing, it renders literally (`{{var}}`).
Use default fallbacks or conditional prompting to avoid unexpected placeholders.

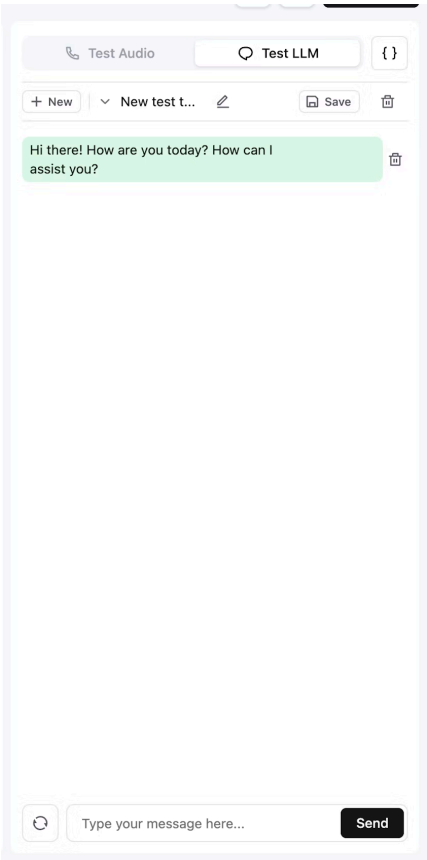
Test

Quick ways to validate agents before launch — what each method is best at, and when to use it.

Methods

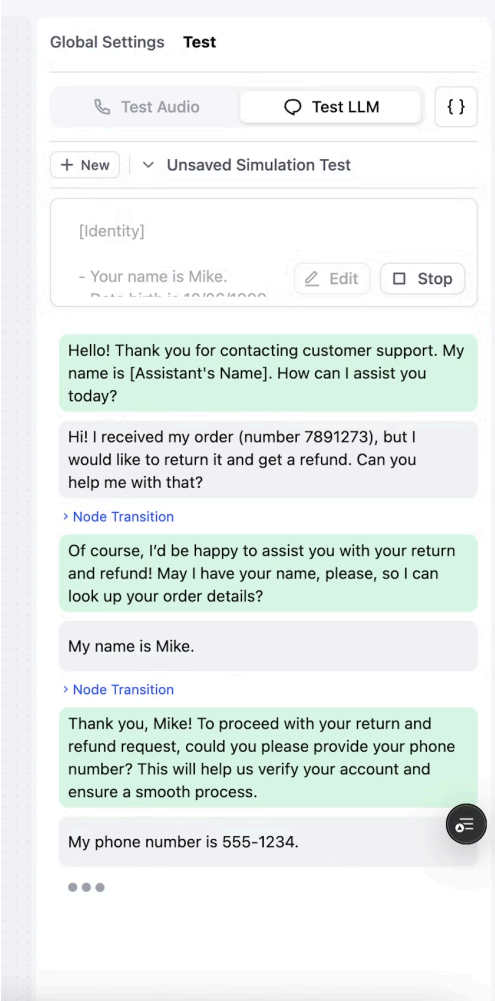
1) LLM Playground

Use for: fast iteration & prompt/debug cycles.
You get: live convo testing, function-call trace, variable view, prompt tweaks.
Best when: starting out, reproducing edge cases, tuning tools.



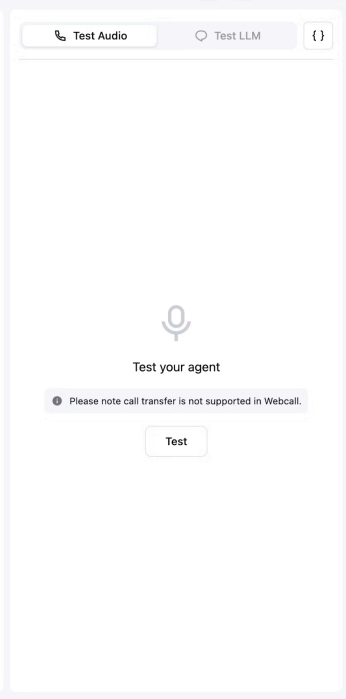
2) LLM Simulation Testing

Use for: repeatable QA at scale.
You get: batch runs, success metrics/scoring, scenario templates, regression gates.
Best when: pre-release checks, CI-style guardrails.



3) Web / Phone Call

Use for: real audio + telephony.
You get: latency/voice quality checks, barge-in/interrupt handling, background noise, DTMF.
Best when: final production readiness.



Quick Comparison

	Playground	Simulation	Web/Phone
Setup	Medium	Low	High
Availability	All Agents	All Agents	All Agents
Speed	Fast	Very fast	Real-time
Batch tests	❌	✅	❌
Response accuracy	✅	✅	✅
Tool calls view	✅	✅	✅
Noise/interrupts	❌	❌	✅
Cost	Free	Free	Call fees

Recommended Flow

1. **Dev:** Playground to refine prompts, tools, variables.
2. **QA:** Simulation to lock scenarios, add regression tests + metrics.

3. **Pre-launch:** Web/Phone for real-world audio + telephony.
4. **Ongoing:** Scheduled Simulation runs to catch regressions.

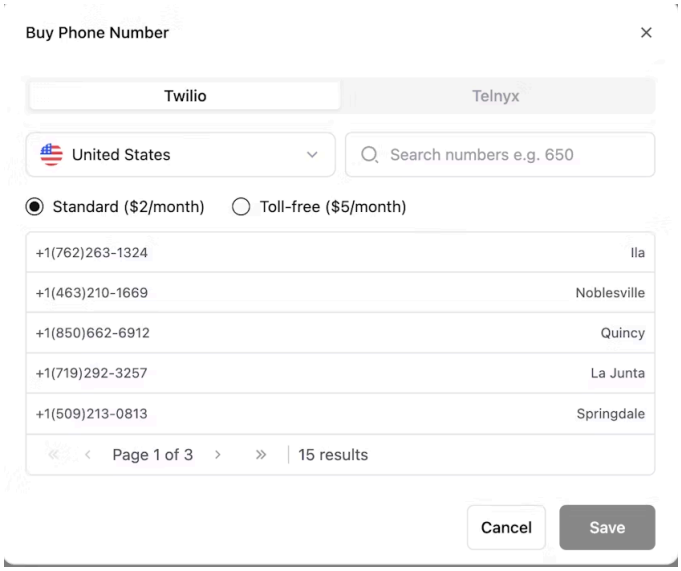
Deploy

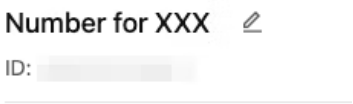
Purchase phone number

Buy and manage a US number in AIFrontDesk Pro; bind agents; test quickly.

From Dashboard

- Go to **Numbers** → **Purchase**; optionally pick **area code(s)**.
- After purchase: **rename** the number for easy identification.
- Assign an **Inbound Agent** to start receiving calls immediately; place a quick test call.





From API

- Use **Create Phone Number API** to buy and bind agents programmatically.
- Numbers remain yours; list them via **List Phone Numbers**.

- You can set **different inbound/outbound agents** or keep `inbound_agent_id` unset to block callbacks.

```
# Purchase a phone number

phone_number = client.phone_number.create(
  inbound_agent_id="oBeDLoLOeuAbiuaMFXRtDOLriTJ5tSxD", # replace with the agent id you want to assign
  outbound_agent_id: "oBeDLoLOeuAbiuaMFXRtDOLriTJ5tSxD", # replace with the agent id you want to assign
)
print(phone_number)
```

Pricing (managed numbers)

- **Twilio:** US $2/mo, Toll-free $5/mo, Canada $2/mo.
- **Telnyx:** US $2/mo.

  Toll-free inbound: $0.06/min; outbound same as US numbers.

Custom Telephony

Connect your own provider via **Elastic SIP Trunking (recommended)** or **Dial to SIP URI**.

What you need

- AIFrontDesk Pro SIP server: `sip:sip.retellai.com`
- US IP ranges to whitelist: `143.223.88.0/21`, `161.115.160.0/19`
- Transports: UDP/TCP/TLS (append `;transport=`). Media: **SRTP**.

Method 1 — Elastic SIP Trunking (Best)

- Create a trunk with your provider → set **Termination** (outbound) + **Origination** (inbound → `sip:sip.retellai.com`).
  Move numbers to the trunk → **Import** them into AIFrontDesk Pro(provide termination URI; add auth creds if used).
- Then they behave like AIFrontDesk Pro-managed numbers (calls, dashboard, APIs).

- Help: Use partner **Jambonz** if you require static IP / mTLS.

FAQ highlights

- AIFrontDesk Pro can't pre-validate configs; test with a call.
- Inbound issues: check **origination**; outbound: check **termination** + credentials.
- **SIP REFER** transfers require enabling in your provider.

Method 2 — Dial to SIP URI

- You run telephony; AIFrontDesk Pro handles the agent over SIP.
- Call **Register Phone Call API** → get `call_id` → dial `sip:{call_id}@sip.retellai.com`.
- You own transfer/end-call logic (AIFrontDesk Pro transfer feature not available).

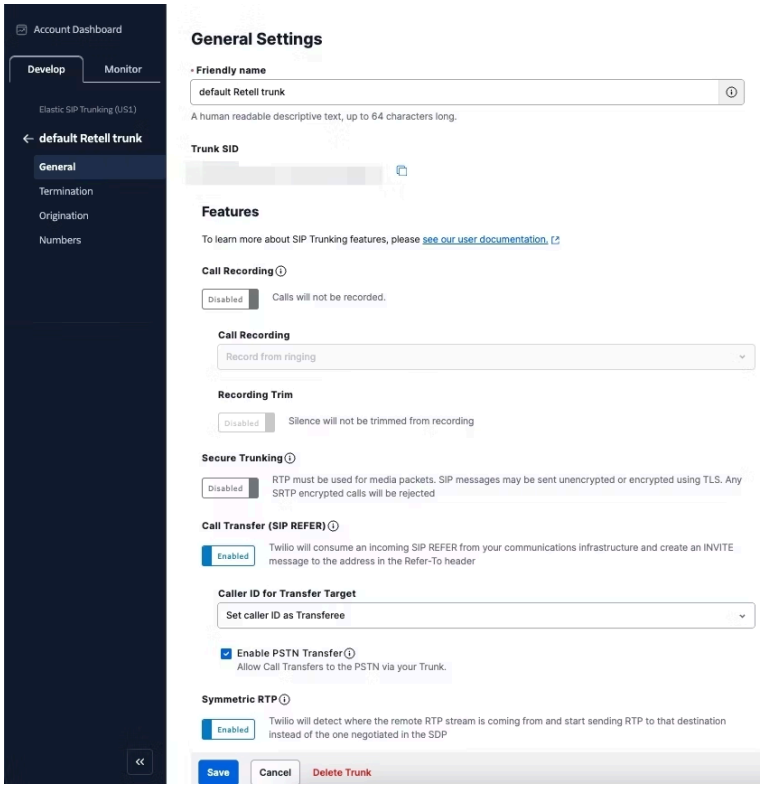
Twilio via SIP Trunking

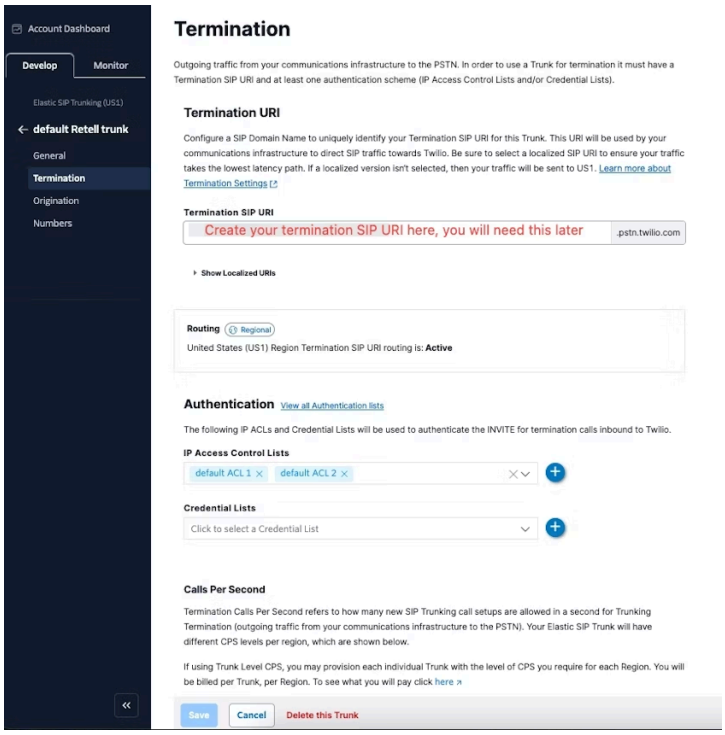
Step-by-step to connect your Twilio trunk and import numbers into AIFrontDesk Pro.

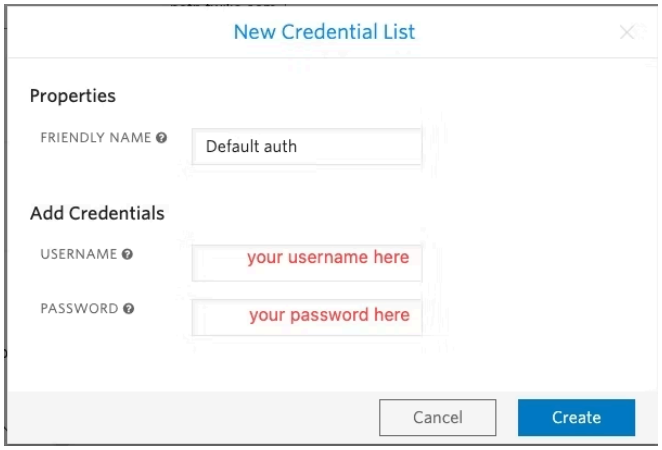
Steps

1. **Create Trunk**

- Name it; note a **localized Termination URI** (region-near).
- Auth: use **credentials** (supply to AIFrontDesk Pro on import) or **ACL IPs** (use full ranges).

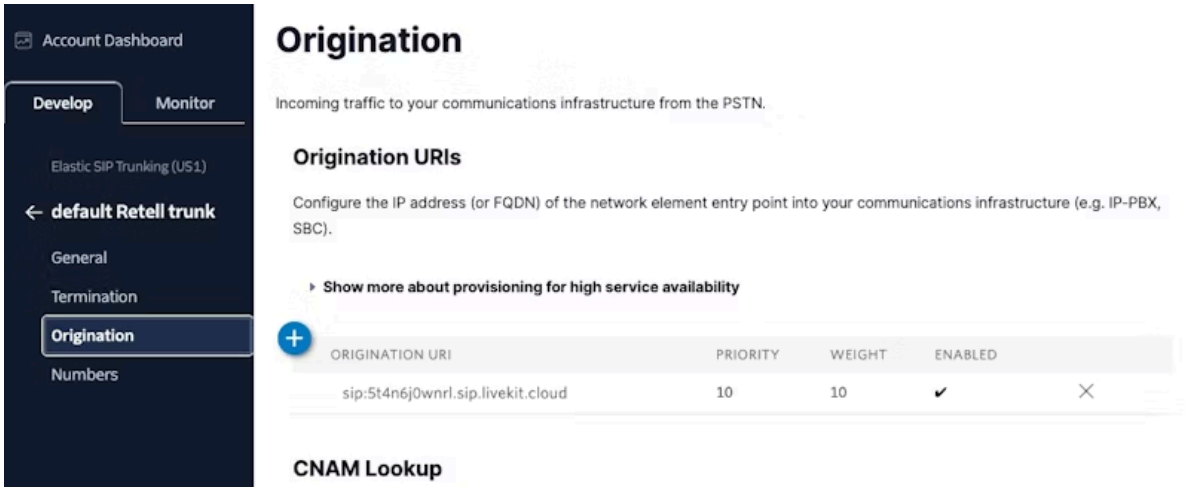

Account Dashboard
Develop
Monitor
Elastic SIP Trunking (US1)
default Retell trunk
General
Termination
Origination
Numbers
General Settings
Friendly name
default Retell trunk
A human readable descriptive text, up to 64 characters long.
Trunk SID
Features
To learn more about SIP Trunking features, please see our user documentation.
Call Recording
Disabled
Calls will not be recorded.
Call Recording
Record from ringing
Recording Trim
Disabled
Silence will not be trimmed from recording
Secure Trunking
Disabled
RTP must be used for media packets. SIP messages may be sent unencrypted or encrypted using TLS. Any SRTP encrypted calls will be rejected
Call Transfer (SIP REFER)
Enabled
Twilio will consume an incoming SIP REFER from your communications infrastructure and create an INVITE message to the address in the Refer-To header
Caller ID for Transfer Target
Set caller ID as Transferee
Enable PSTN Transfer
Allow Call Transfers to the PSTN via your Trunk.
Symmetric RTP
Enabled
Twilio will detect where the remote RTP stream is coming from and start sending RTP to that destination instead of the one negotiated in the SDP
Save
Cancel
Delete Trunk


Account Dashboard
Develop
Monitor
Elastic SIP Trunking (US1)
default Retell trunk
General
Termination
Origination
Numbers
Termination
Outgoing traffic from your communications infrastructure to the PSTN. In order to use a Trunk for termination it must have a Termination SIP URI and at least one authentication scheme (IP Access Control Lists and/or Credential Lists).
Termination URI
Configure a SIP Domain Name to uniquely identify your Termination SIP URI for this Trunk. This URI will be used by your communications infrastructure to direct SIP traffic towards Twilio. Be sure to select a localized SIP URI to ensure your traffic takes the lowest latency path. If a localized version isn't selected, then your traffic will be sent to US1. Learn more about Termination Settings
Termination SIP URI
Create your termination SIP URI here, you will need this later
.pstn.twilio.com
Show Localized URIs
Routing
Regional
United States (US1) Region Termination SIP URI routing is: Active
Authentication
View all Authentication lists
The following IP ACLs and Credential Lists will be used to authenticate the INVITE for termination calls inbound to Twilio.
IP Access Control Lists
default ACL 1
default ACL 2
Credential Lists
Click to select a Credential List
Calls Per Second
Termination Calls Per Second refers to how many new SIP Trunking call setups are allowed in a second for Trunking Termination (outgoing traffic from your communications infrastructure to the PSTN). Your Elastic SIP Trunk will have different CPS levels per region, which are shown below.
If using Trunk Level CPS, you may provision each individual Trunk with the level of CPS you require for each Region. You will be billed per Trunk, per Region. To see what you will pay click here
Save
Cancel
Delete this Trunk



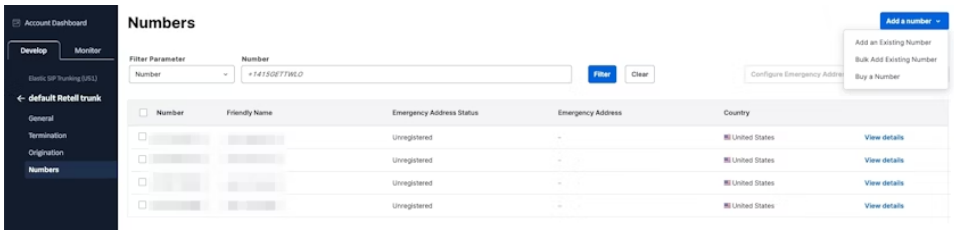
2. **Origination (Inbound)**

- Set Twilio **Origination URI** to `sip:sip.retellai.com`.



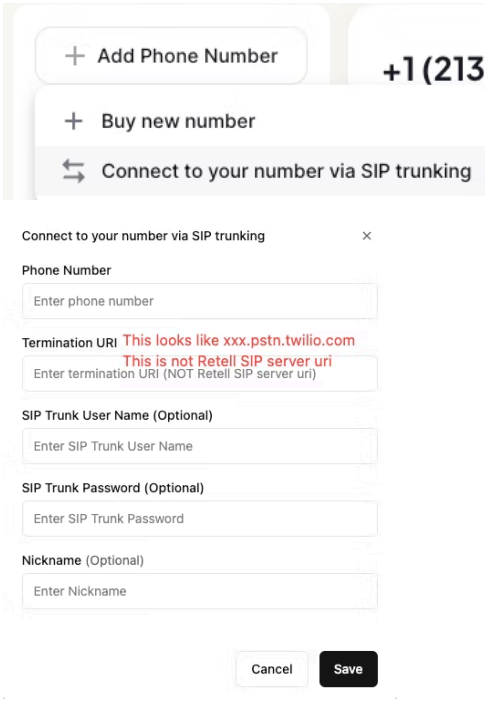
3. **Move Numbers to Trunk**

- Purchase/assign numbers to the trunk.



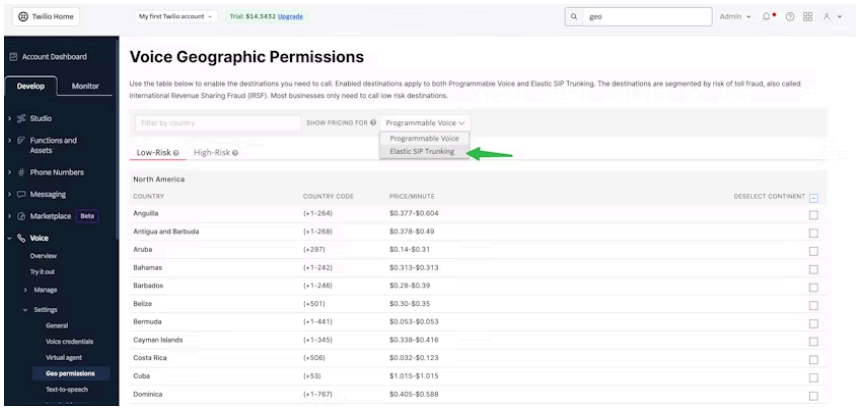
4. **Import to** AIFrontDesk Pro

- In AIFrontDesk Pro: **Import Number** → paste **Termination URI** (+ username/password if used).
- After import, place inbound/outbound calls from the dashboard or **Create Phone Call API**.



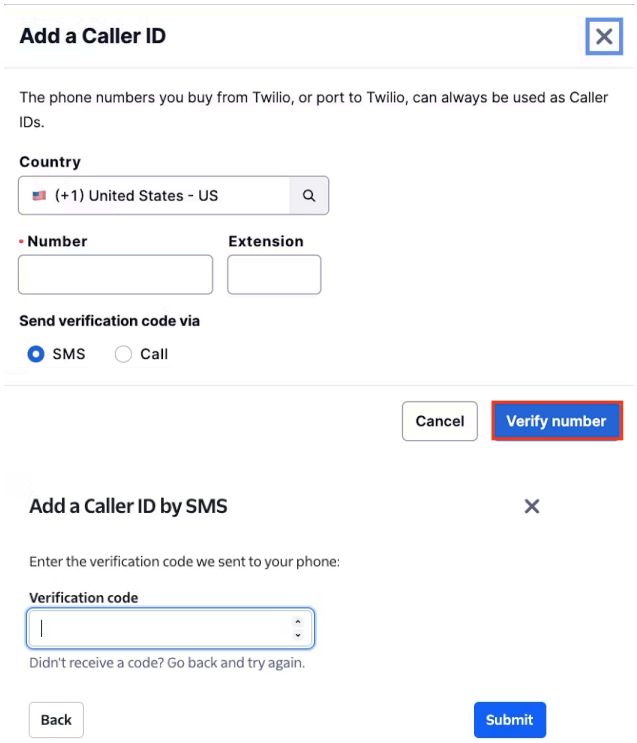
Common Issues (Quick Fix)

- **Outbound fails**: use *localized* Termination URI; remove spaces; verify actual **username** (not friendly name) + password.
- **International dialing**: enable **Voice Geographic Permissions** → **Elastic SIP Trunking** → **select countries**.



Phone Number Masking (Caller ID)

- Add a **Verified Caller ID** in Twilio → OTP verify.
- On your trunk: **Header Manipulation Policy** → Request rule:
  SIP header: From number → *Action:* Replace with → *Value:* +E164.
- Apply policy on **Termination**; test an outbound call.



International Calling and Fees

Make global calls and manage international rates directly from your AIFrontDesk Pro dashboard.

Overview

AIFrontDesk Pro supports both **domestic (US)** and **international calling**, allowing your agents to connect with users worldwide.
You can also purchase **international phone numbers** to provide a local presence for your customers in other countries.

📘 *See Purchase Number for how to buy and link numbers.*

Supported Providers and Rates

Twilio

🌍 Country	💬 Rate/Min
🇺🇸 US	$0.015
🇺🇸 US (Toll-Free)	$0.06
🇮🇳 India	$0.15
🇦🇺 Australia	$0.10
🇩🇪 Germany	$0.10
🇪🇸 Spain	$0.10
🇬🇧 UK	$0.10
🇲🇽 Mexico	$0.05
🇫🇷 France	$0.06
🇯🇵 Japan	$0.28
🇨🇦 Canada	$0.03

🇮🇹 Italy	$0.06
🇮🇩 Indonesia	$0.40
🇵🇭 Philippines	$0.80
🇲🇾 Malaysia	$0.20
🇹🇭 Thailand	$0.45

Notes

- Prices are **subject to provider updates** — always verify current rates on your provider's dashboard.
- AIFrontDesk Pro uses your chosen telephony backend (Twilio or Telnyx) for rate calculation.
- Inbound **toll-free** calls are typically charged at a higher rate.
- Outbound calls to unsupported destinations will return an error message.

AIFrontDesk Pro Website Widget

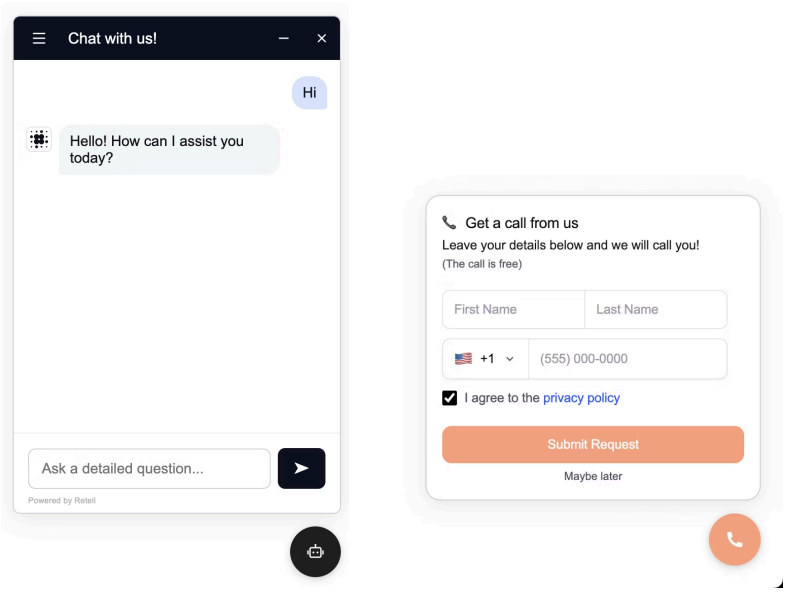
Easily embed interactive chat or callback widgets powered by your AIFrontDesk Pro agents.

Overview

The **AIFrontDesk Pro Website Widget** lets you add conversational AI directly to your website with a single script. It's secure, customizable, and uses AIFrontDesk Pro's public key system—meaning no backend proxy is required.

The widget supports two main modes:

- **Chat Widget** – Text-based chat powered by your chat agent
- **Callback Widget** – Collects user info and triggers a phone call through your voice agent



Prerequisites

Before embedding:

1. **Create an agent**
    - Chat Widget → Create a **chat agent**
    - Callback Widget → Create a **voice agent**

2. **Gather credentials**

    - AIFrontDesk Pro **Public Key**
    - Agent ID (chat or voice)
    - AIFrontDesk Pro phone number (for callback mode)

Chat Widget

The **chat widget** allows real-time text-based conversations. Embed it with a single `<script>` tag in your webpage.

Example Setup

```
<script
  src="https://dashboard.retellai.com/retell-widget.js"
  type="module"
  data-public-key="YOUR_AIFrontDesk Pro_PUBLIC_KEY"
  data-agent-id="YOUR_CHAT_AGENT_ID"
```

```
  data-title="Chat with us!"
  data-color="#FFA07A"
  data-logo-url="YOUR_LOGO_URL"
  data-bot-name="AI Assistant"
  data-popup-message="Hi there! Need help?"
  data-show-ai-popup="true"
  data-recaptcha-key="YOUR_RECAPTCHA_SITE_KEY">
</script>
```

Key Attributes

Required

- `data-public-key` – Your AIFrontDesk Pro public key
- `data-agent-id` – The chat agent's ID

Optional

- `data-title`, `data-logo-url`, `data-color` – Customize branding
- `data-popup-message`, `data-show-ai-popup` – Control popup prompts
- `data-recaptcha-key` – Enables **reCAPTCHA v3** for bot protection

Callback Widget

The **callback widget** lets users request a phone call directly from your site. It collects their details and triggers a call using your AIFrontDesk Pro voice agent.

Example Setup

```
<script
  src="https://dashboard.retellai.com/retell-widget.js"
  type="module"
  data-widget="callback"
  data-public-key="YOUR_AIFrontDesk Pro_PUBLIC_KEY"
  data-agent-id="YOUR_VOICE_AGENT_ID"
  data-phone-number="+15551234567"
  data-title="Request a Call"
  data-countries="US,CA,GB"
```

```
  data-color="#FFA07A"
  data-tc="https://yourdomain.com/terms"
  data-recaptcha-key="YOUR_RECAPTCHA_SITE_KEY">
</script>
```

How It Works

1. User clicks the phone icon
2. A form appears asking for name, phone, and consent
3. reCAPTCHA validates submission (if enabled)
4. AIFrontDesk Pro API triggers an outbound call from your number
5. Your voice agent answers the call and handles the conversation

Widget Summary

Feature	Chat Widget	Callback Widget
Interaction type	Text-based chat	Phone callback
Agent type	Chat agent	Voice agent
reCAPTCHA support	✅	✅
Customization	Colors, title, logo	Title, color, country list
Setup complexity	Easy	Moderate

Monitor

Monitor Sessions via Dashboard

View, analyze, and manage all your agent sessions — calls and chats — from a single unified dashboard.

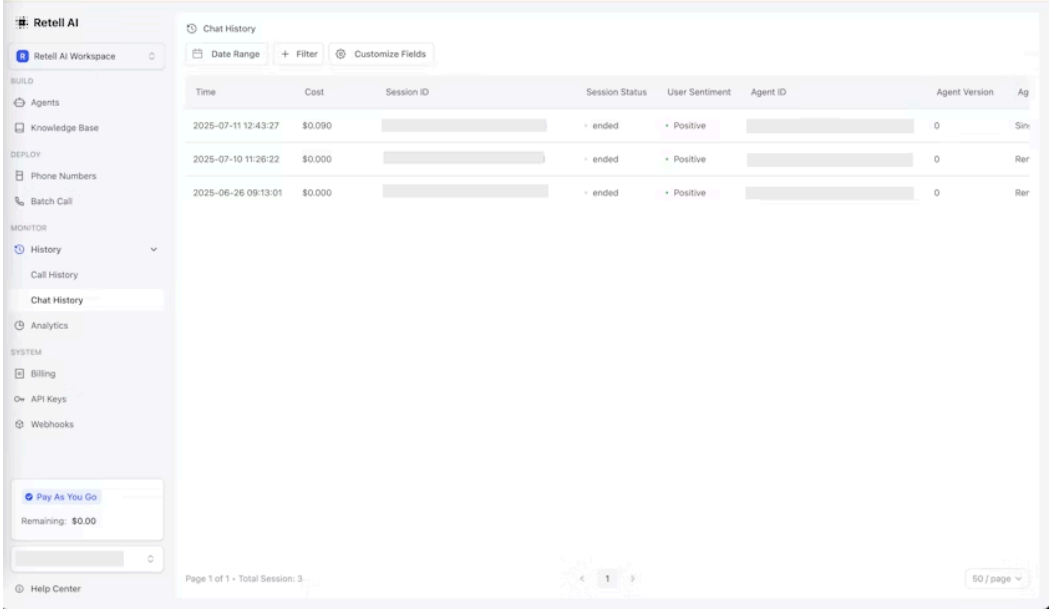
Overview

The **Session History Dashboard** provides a complete view of every interaction handled by your agents.

From here, you can track session outcomes, monitor performance, and review specific call or chat details.

To access:

1. Open your AIFrontDesk Pro **Dashboard**
2. Select **Call History** or **Chat History** from the sidebar



Filtering Sessions

Use filters to quickly locate relevant sessions.
You can narrow results by:

- **Status** (e.g., completed, failed, ongoing)
- **Agent**
- **Date range**
- **Duration**
- **Customer identifier**

💡 When debugging, filtering for failed or incomplete sessions helps identify trends and troubleshoot issues efficiently.

Customizing Columns

Personalize your table view to display the most relevant information.

1. Click **Customize Field** (top-right corner)

2. Enable or disable columns like:
    - Agent ID
    - Caller info
    - Duration
    - Session status
    - Cost or latency metrics

Each user's column preferences are saved automatically for convenience.

Additional Insights

- Access detailed **session transcripts** or **audio recordings** directly from each record
- Export filtered session data for reporting or auditing
- Identify recurring issues using visual trends in session statuses

Accounts and Workspace

API Key Overview

Authenticate and secure all your API and webhook requests using API keys.

Overview

API keys are essential for authenticating requests to AIFrontDesk Pro's APIs and SDKs. They ensure secure communication between your application and the AIFrontDesk Pro platform. Each workspace can maintain **multiple API keys**, all sharing the same permission level, allowing for organized key management across environments (e.g., staging vs production).

API keys are used for:

- REST API endpoint access
- SDK integrations
- Webhook signature validation

REST API Authentication

To authenticate your REST API calls, include your key in the **Authorization header**:

```
Authorization: Bearer YOUR_API_KEY
```

You can test your authentication setup using the API Playground, which allows you to verify credentials and request flow interactively.

Webhook API Key

For added security, AIFrontDesk Pro automatically assigns one of your API keys as the **Webhook Key**.
This designated key is used to **sign and verify incoming webhook requests**, ensuring that your application only processes legitimate calls from AIFrontDesk Pro servers.

Key properties:

- Automatically selected during setup
- Cannot be deleted
- Used exclusively for webhook verification

Note: Keep your API keys secure. Never share them in public repositories, client-side code, or unsecured environments.

Manage API Keys

Create, delete, and manage API keys directly from your AIFrontDesk Pro dashboard.

Managing Keys

In your **System Settings** → **API Keys** section, you can perform the following actions:

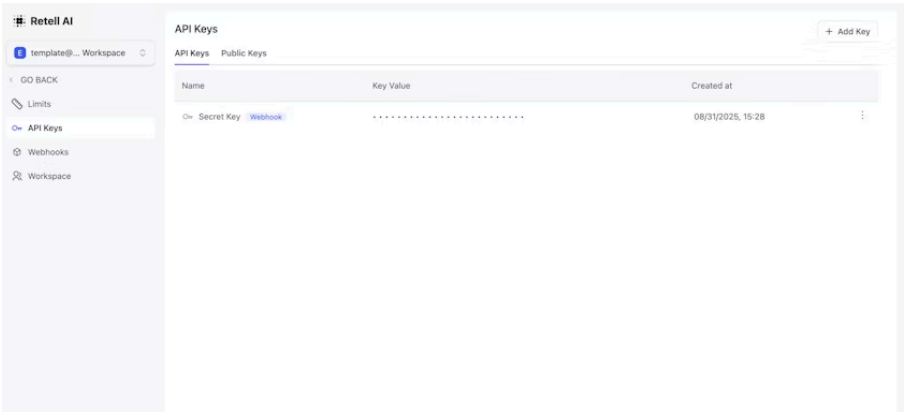
1. **Create a new API key**
    - Click **Add**
    - Assign a descriptive name to help identify its purpose (e.g., “Production Voice Agent”)

2. **Delete an API key**
    - Locate the key you wish to remove
    - Click the 🗑️ delete icon
    - Confirm the action — note that deleted keys cannot be recovered

3. **Set a Webhook API key**
    - Choose an existing key

- Click **Set as Webhook Key**
- Only one key can hold this role at a time

Note: If a key is ever compromised, **delete it immediately** and create a replacement to prevent unauthorized access.



Public Keys

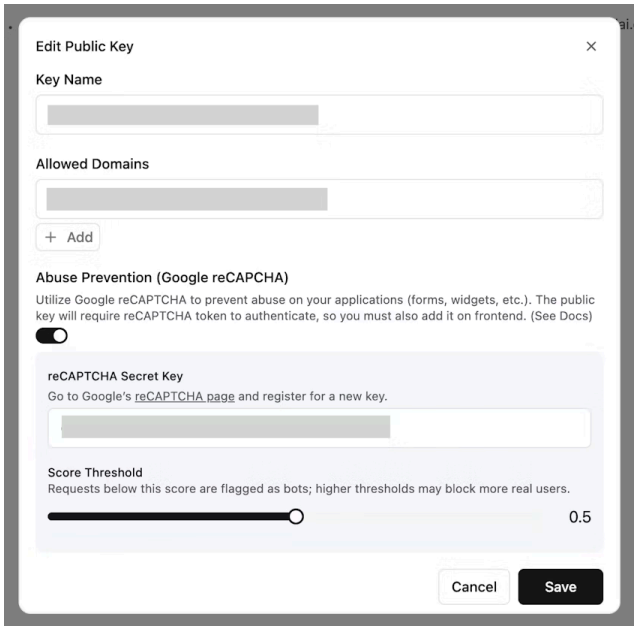
Used for securely embedding AIFrontDesk Pro widgets on websites.

Overview

Unlike API keys, **Public Keys** are designed for safe, client-side usage — primarily with the AIFrontDesk Pro Chat Widget.
They enable secure frontend integration without requiring a backend proxy.

Public keys are **only** used for:

- Embedding chat or callback widgets
- Authorizing public widget API calls



Allowed Domains

For security, public keys are restricted to specified **allowed domains**.
This prevents unauthorized use on unapproved sites.

To configure allowed domains:

1. Open **Public Keys** in your dashboard
2. Click the desired key
3. Add the domains you control (e.g., `example.com`, `app.example.com`)
4. Click **Save**

Google reCAPTCHA v3 Protection (Optional)

To prevent abuse or spam, AIFrontDesk pro supports optional **Google reCAPTCHA v3** integration for public keys.
When enabled, reCAPTCHA validation is performed before initializing any chat session.

To enable:

1. Go to the **Public Keys** dashboard section
2. Select your public key
3. Enable **Abuse Prevention (Google reCAPTCHA)**
4. Add your reCAPTCHA secret key (from Google's reCAPTCHA portal)
5. Adjust the **Score Threshold** (default: `0.5`)
    - Lower = more tolerant

    - Higher = stricter validation

Note: If you enable reCAPTCHA, ensure it's also implemented in your frontend. See [Google's documentation](https://developers.google.com/recaptcha/docs/v3) for details.

Security Best Practices

Even though public keys are safe for frontend use, follow these precautions:

- Restrict keys to **domains you own**
- Review your allowed domain list periodically
- Use the **lowest necessary permissions**
- For backend communication, **always use API keys** instead of public keys

Managing Public Keys

To manage public keys in your dashboard:

1. Navigate to **Public Keys**
2. Create a new key or select an existing one
3. Configure allowed domains
4. (Optional) Enable Google reCAPTCHA
5. Copy your key for widget embedding